

For Research Use Only

# CoraLite®594-conjugated PCNA Polyclonal antibody



Catalog Number: CL594-10205

Featured Product

1 Publications

## Basic Information

|   |   |   |
|---|---|---|
| <b>Catalog Number:</b><br>CL594-10205                             | <b>GenBank Accession Number:</b><br>BC000491            | <b>Purification Method:</b><br>Antigen affinity purification          |
| <b>Size:</b><br>100ul , Concentration: 1000 µg/ml by<br>Nanodrop; | <b>GeneID (NCBI):</b><br>5111                           | <b>Recommended Dilutions:</b><br>IF 1:50-1:500                        |
| <b>Source:</b><br>Rabbit  | <b>Full Name:</b><br>proliferating cell nuclear antigen | <b>Excitation/Emission maxima<br/>wavelengths:</b><br>588 nm / 604 nm |
| <b>Isotype:</b><br>IgG  | <b>Calculated MW:</b><br>29 kDa/31 kDa                  |   |
| <b>Immunogen Catalog Number:</b><br>AG0277                        | <b>Observed MW:</b><br>36-38 kDa                        |   |

## Applications

|  |   |
|--|---|
| <b>Tested Applications:</b><br>FC (Intra), IF    | <b>Positive Controls:</b><br>IF : human breast cancer tissue, human liver cancer<br>tissue, mouse testis tissue |
| <b>Cited Applications:</b><br>IF                 |   |
| <b>Species Specificity:</b><br>human, mouse, rat |   |
| <b>Cited Species:</b><br>human                   |   |

## Background Information

Proliferating Cell Nuclear Antigen, commonly known as PCNA, is a protein that acts as a processivity factor for DNA polymerase  $\delta$  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. This antibody is a rabbit polyclonal antibody raised against an internal region of human PCNA. The calculated molecular weight of PCNA is 29 kDa, but modified PCNA is 36kDa (PMID: 1358458).

## Notable Publications

| Author    | Pubmed ID | Journal       | Application |
|-----------|-----------|---------------|-------------|
| Jiayu Guo | 37511343  | Int J Mol Sci | IF          |

## Storage

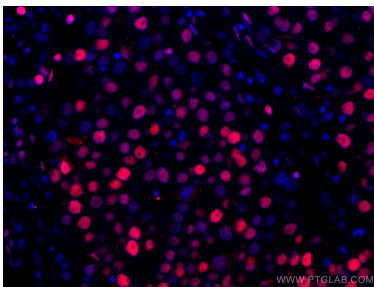
**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

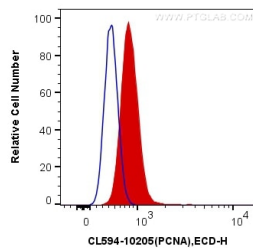
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

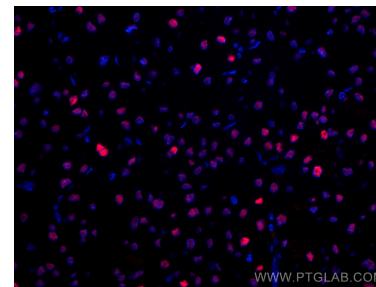
## Selected Validation Data



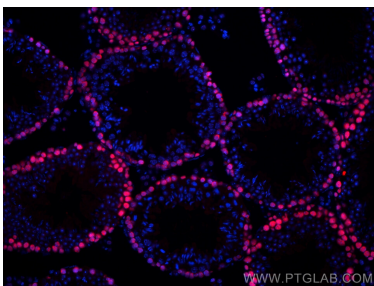
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using CoraLite®594 PCNA antibody (CL594-10205) at dilution of 1:200.



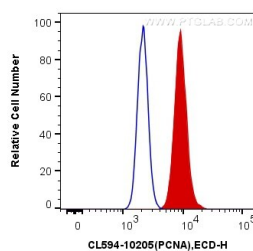
1X10<sup>6</sup> Jurkat cells were intracellularly stained with 0.4 ug CoraLite®594 Anti-Human PCNA (CL594-10205) (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using CoraLite®594 PCNA antibody (CL594-10205) at dilution of 1:200.



Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using CoraLite®594 PCNA antibody (CL594-10205) at dilution of 1:200.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug CoraLite®594 Anti-Human PCNA (CL594-10205) (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).