PCNA Polyclonal antibody

Catalog Number: 10205-2-AP  Featured Product  792 Publications

Basic Information

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<th>Catalog Number</th>
<th>10205-2-AP</th>
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<tbody>
<tr>
<td>Size</td>
<td>150μl, Concentration: 550 μg/ml by Nanodrop</td>
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<tr>
<td>Source</td>
<td>Rabbit</td>
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<tr>
<td>Isotype</td>
<td>IgG</td>
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<tr>
<td>Immunogen Catalog Number</td>
<td>AG0277</td>
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GenBank Accession Number: BC000491
GeneID (NCBI): 5111
Full Name: proliferating cell nuclear antigen
Calculated MW: 29 kDa/31 kDa
Observed MW: 36-38 kDa

Purification Method: Antigen affinity purification

Recommended Dilutions:
- WB: 1:5000-1:50000
- IP: 0.5-4.0 μg for IP and 1:5000-1:5000 for WB
- IHC: 1:1500-1:5000
- IF: 1:5000-1:1200

Applications

Tested Applications:
- FC, IF, IHC, IP, WB, ELISA

Cited Applications:
- Cell treatment, CoIP, ELISA, IF, IHC, WB

Species Specificity:
- human, mouse, rat

Cited Species:
- human, goat, chicken, medaka embryos, rat, sheep, mouse, ducks, rabbit, fish

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

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. 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

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
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<tbody>
<tr>
<td>Yongchun Yu</td>
<td>36183674</td>
<td>Transl Oncol</td>
<td>WB</td>
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<tr>
<td>Bing Sun</td>
<td>27684953</td>
<td>PLoS One</td>
<td>WB</td>
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<tr>
<td>Xiaobing Zhao</td>
<td>36169673</td>
<td>J Mol Med (Bert)</td>
<td>WB</td>
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</table>

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.
Aliquotting is unnecessary for -20°C storage

*** 20μl 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) 655-8498 (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.
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using PCNA antibody (10205-2-AP) at dilution of 1:600 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Control Antibody, Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).

1X10^6 Jurkat cells were intracellularly stained with 0.2 ug Anti-Human PCNA (10205-2-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), and 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).

Selected Validation Data

WB result of PCNA antibody (10205-2-AP, 1:10000) with si-control and si-PCNA transfected HEK293 cells.

Various lysates were subjected to SDS PAGE followed by western blot with 10205-2-AP (PCNA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 10205-2-AP (PCNA antibody), at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).


Various lysates were subjected to SDS PAGE followed by western blot with 10205-2-AP (PCNA antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.

Various lysates were subjected to SDS PAGE followed by western blot with 10205-2-AP (PCNA antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.


Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 10205-2-AP (PCNA antibody) at dilution of 1:3000 (under 60x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 10205-2-AP (PCNA antibody) at dilution of 1:6000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using PCNA antibody (10205-2-AP) at dilution of 1:600 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).
Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using PCNA antibody (10205-2-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).