Datasheet for ABIN7536214

# PCNA Protein

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## Overview

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| Quantity: | 100 µg |
| Target: | PCNA |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |

## Product Details

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| Purpose: | Recombinant Human Proliferating cell nuclear antigen/PCNA Protein |
| Sequence: | FEARLVQGSI LKKVLEALKD LINEACWDIS SSGVNLQSMD SSHVSLVQLT LRSEGFDTYR CDRNLAMGVN LTSMSKILKC AGNEDIITLR AEDNADTLAL VFEAPNQEKV SDYEMKLMDL DVEQLGIPEQ EYSCVVKMPS GEFARICRDL SHIGDAVVIS CAKDGVKFSA SGELGNGNIK LSQTSNVDKE EEAVTIEMNE PVQLTFALRY LNFFTKATPL SSTVTLSMSA DVPLVVEYKI ADMGHLKYYL APKIEDEEGS |
| Specificity: | Phe2-Ser261 |
| Purity: | > 92 % by SDS-PAGE. |
| Sterility: | 0.22 µm filtered |
| Endotoxin Level: | <0.1EU/µg |

## Target Details

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| Target: | PCNA |
| Alternative Name: | Proliferating cell nuclear antigen/PCNA (PCNA Products) |

## Target Details

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| Background: | Description: Proliferating Cell Nuclear Antigen (PCNA) is a protein only expressed in normal proliferate cells and cancer cells. It is central to both DNA replication and repair. One of the well-established functions for PCNA is its role as the processivity factor for DNA polymerase delta and epsilon. PCNA tethers the polymerase catalytic unit to the DNA template for rapid and processive DNA synthesis. Two forms of PCNA exist in cells: (i) a detergent-insoluble trimeric form stably associated with the replicating forks during S phase and (ii) a soluble form in quiescent cells in G1 and G2 phases. PCNA forms a toroidal trimer in S phase with replication factor-C (RF-C) and DNA in an ATP-dependent manner and enables the loading of DNA polymerase delta and epsilon onto the complex. The close association of PCNA with kinase complexes involved in cell cycle machinery indicates that PCNA has a regulatory role in cell cycle progression. PCNA also participates in the processing of branched intermediates that arise during the lagging strand DNA synthesis.<br>Name: ATLD2,Proliferating cell nuclear antigen,PCNA |
| Gene ID: | 5111 |
| UniProt: | P12004 |
| Pathways: | Telomere Maintenance, DNA Damage Repair, Mitotic G1-G1/S Phases, DNA Replication, Synthesis of DNA, Autophagy |

## Application Details

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| Restrictions: | For Research Use only |

## Handling

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| Format: | Lyophilized |
| Reconstitution: | Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1 % BSA, 5 % HSA, 10 % FBS or 5 % Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles. |
| Concentration: | 1.6 mg/mL |
| Buffer: | Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. |
| Storage: | -20 °C,-80 °C |
| Storage Comment: | Store the lyophilized protein at -20°C to -80°C for 12 months.\|After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. |