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Datasheet for ABIN7536214

PCNA Protein

Overview

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

Product Details

Purpose:	Recombinant Human Proliferating cell nuclear antigen/PCNA Protein
Sequence:	FEARLVQGSILKKVLEALKDLINACWDISSSGVNLQSMDSHVSLVQLTLRSEGFDTYR CDRNLMAMGVNLTSMKILKCAAGNEDIITLRAEDNADTLALVFEAPNQEKVSDYEMKLMIDL DVEQLGIPEQEYSCVVKMPSGEFARICRDLSHIGDAVVISCAKDGVKFSA SGELGNGNIKLSQTSNVDKEEEAVTIEMNEPVQLTFALRYLNFFTKATPLSSTVTLSMSADVPLVVEYKI ADMGHLLKYYLAPKIEDEEGS
Specificity:	Phe2-Ser261
Purity:	> 92 % by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	<0.1EU/µg

Target Details

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

Target Details

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.

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

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (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.