

California Bioscience

Product Datasheet

Product Name	Proliferating Cell Nuclear AntigenHuman Recombinant
Cata No	CB501472
Source	Escherichia Coli.
Synonyms	Proliferating cell nuclear antigen, PCNA, Cyclin, MGC8367.

Description

PCNA is located in the nucleus and is a cofactor of DNA polymerase delta. PCNA acts as a homotrimer and helps elevate the processivity of leading strand synthesis during DNA replication. In reaction to DNA damage, PCNA is ubiquitinated and takes part in the RAD6-dependent DNA repair pathway. 2 transcript variants encoding the same protein have been found for PCNA gene. Pseudogenes of this PCNA gene have been described on chromosome 4 and on the X chromosome. PCNA is expressed during late G1- phase, S-phase of mitosis and persists until the end of the M-phase because of its long biological half-life. PCNA is induced by UV irradiation.

PCNA Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 261 amino acids and having a molecular mass of 28769 Dalton.

Physical Appearance

Sterile Filtered colorless solution.

Purity

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Formulation

The PCNA solution contains 20mM Tris pH-7.5 & 2mM EDTA & 20% glycerol.

Stability

PCNA although stable 4°C for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Sequence

MFEARLVQGS ILKKVLEALK DLINEACWDI SSSGVNLQSM DSSHVSLVQLTLRSEGFDTY RCDRNLAMGV NLTSMSKILK CAGNEDIITL RAEDNADTLA LVFEAPNQEK VSDYEMKLMD LDVEQLGIPE QEYSCVVKMP SGEFARICRD LSHIGDAVVI SCAKDGVKFS ASGELGNGNI KLSQTSNVDK EEEAVTIEMN EPVQLTFALR YLNFFTKATP LSSTVTLSMS ADVPLVVEYK IADMGHLKYY LAPKIEDEEG S.