# Recombinant Human PCNA, His (rHuPCNA, His)

## PrimeGene Technical DataSheet

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| **Catalog Number:** | 611-01 |
| **Source:** | *Escherichia coli* |
| **Molecular Weight:** | Approximately 29.60 KDa, a single non-glycosylated polypeptide chain containing 267 amino acids. |
| **Size:** | 10μg/ 100μg/ 500μg/ 1mg |
| **AA Sequence:** | MHHHHHHFEARLVQGSILKKVLEALKDLINEACWDISSSGVNLQSMDSSHVSLVQLTLRSEG FDTYRCDRNLAMGVNLTSMSKILKCAGNEDIITLRAEDNADTLALVFEAPNQEKVSDYEMK LMDLDVEQLGIPEQEYSCVVKMPSGEFARICRDLSHIGDAVVISCAKDGVKFSASGELGNGNI KLSQTSNVDKEEEAVTIEMNEPVQLTFALRYLNFFTKATPLSSTVTLSMSADVPLVVEYKIAD MGHLKYYLAPKIEDEEGS |
| **Purity:** | ≥ 90% by SDS-PAGE analysis. |
| **Biological Activity:** | Test in Process. |
| **Physical Appearance:** | Sterile Filtered White lyophilized (freeze-dried) powder. |
| **Formulation:** | Lyophilized from a 0.2 μm filtered concentrated solution in 20mM Tris, 150mM NaCl, 1mM TCEP, 5% Trehalose, pH8.00. |
| **Endotoxin** | Less than 1 EU/μg of rHuPCNA, His as determined by LAL method. |
| **Reconstitution:** | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions. |
| **Shipping:** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. |
| **Stability & Storage:** | **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 3 months, -20 to -70 °C under sterile conditions after reconstitution. |
| **Usage:** | This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE.** |

### *Human PCNA*

Proliferating Cell Nuclear Antigen (PCNA) is a DNA polymerase that is essential for DNA replication, excision and mismatch repair pathways. PCNA is a "DNA clamp" which binds to the CDK inhibitor p21, the structure-specific endonucleases Fen1 and XPG, and DNA cytosine 5-methyltransferase (MCMT). PCNA is a potentially useful marker of cells with proliferative potential for identifying the proliferation status of tumor tissue (i.e. relevant to prognosis). PCNA antibodies are also useful tools for DNA repair and cancer research.