

Recombinant Human Proliferating cell nuclear antigen(PCNA)



Catalog No: #AP73753

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Package Size: #AP73753-1 10ug #AP73753-2 50ug #AP73753-3 100ug #AP73753-4 200ug #AP73753-5 500ug #AP73753-6 1mg

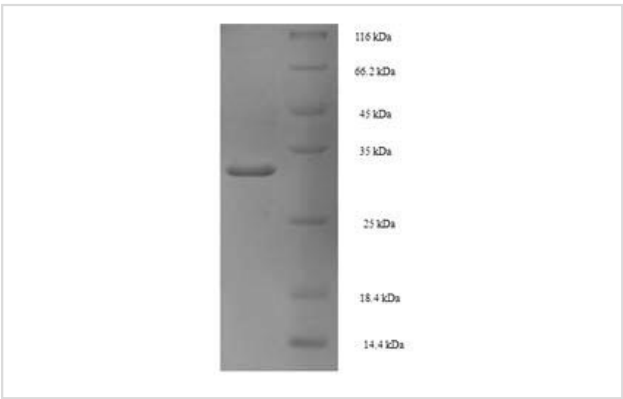
Description

Product Name	Recombinant Human Proliferating cell nuclear antigen(PCNA)
Brief Description	Recombinant Protein
Host Species	E.coli
Target Name	PCNA
Other Names	Cyclin
Accession No.	Uniprot ID: P12004
Target Species	Hu
SDS-PAGE MW	32.85kDa
Target Length	Full Length, 1-261aa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	MFEARLVQGSILKKVLEALKDLNEACWDISSSGVNLQSMDSHVSIVQLTLRSEGFDTYRCDRNLAMGVNLT SMSKILKCAGNEDIITLRAEDNADTLALVFEAPNQEKVSDYEMKLMDLDDVEQLGIPEQEYSCVVKMPSPGEFARI CRDLSHIGDAVVISCAKDGVKFSASGELGNGNIKLSQTSNVDKEEEAVTIEMNEPVQLTFALRYLNFFTKATPL SSTVTLSMSADVPLVVEYKIADMGHLKYYLAPKIEDEEGS
Formulation	Tris-based buffer,50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.

Application Details

Greater than 90% as determined by SDS-PAGE.

Images



Background

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. Induces a robust stimulatory effect on the 3'-5' exonuclease and 3'-phosphodiesterase, but not apurinic-apyrimidinic (AP) endonuclease, APEX2 activities. Has to be loaded onto DNA in order to be able to stimulate APEX2. Plays a key role in DNA damage response (DDR) by being conveniently positioned at the replication fork to coordinate DNA replication with DNA repair and DNA damage tolerance pathways (PubMed:24939902). Acts as a loading platform to recruit DDR proteins that allow completion of DNA replication after DNA damage and promote postreplication repair: Monoubiquitinated PCNA leads to recruitment of translesion (TLS) polymerases, while 'Lys-63'-linked polyubiquitination of PCNA is involved in error-free pathway and employs recombination mechanisms to synthesize across the lesion.

References

"Cloning and sequence of the human nuclear protein cyclin: homology with DNA-binding proteins." Almendral J.M., Huebsch D., Blundell P.A., Macdonald-Bravo H., Bravo R. Proc. Natl. Acad. Sci. U.S.A. 84:1575-1579(1987)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.