

Datasheet for ABIN7554871

## PCNA Protein (AA 1-261) (His tag)



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### Overview

Quantity:	1 mg
Target:	PCNA
Protein Characteristics:	AA 1-261
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PCNA protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Purpose:	Custom-made recombinat PCNA Protein expressed in mammalian cells.
Sequence:	<p>MFEARLVQGS ILKKVLEALK DLINEACWDI SSSGVNLQSM DSSHVSLVQL TLRSEGFDTY  RCDRNLMAGV NLTSMKILK CAGNEDIITL RAEDNADTLA LVFEAPNQE K VSDYEMKLMD  LDVEQLGIPE QEYSCVVKMP SGEFARICRD LSHIGDAVVI SCAKDGVKFS ASGELGNGNI  KLSQTSNVDK EEEAVTIEMN EPVQLTFALR YLNFFTKATP LSSTVTLSMS ADVPLVVEYK  IADMGHLLKYY LAPKIEDEEG S <b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b></p>
Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none"> <li>• Made to order protein - from design to production - by highly experienced protein experts.</li> <li>• Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>• The optimized expression system ensures reliability for intracellular, secreted and</li> </ul>

## Product Details

transmembrane proteins.

- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
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Grade:	custom-made
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## Target Details

Target:	PCNA
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Alternative Name:	PCNA ( <a href="#">PCNA Products</a> )
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Background:	<p>Proliferating cell nuclear antigen (PCNA) (Cyclin),FUNCTION: Auxiliary protein of DNA polymerase delta and epsilon, is involved in the control of eukaryotic DNA replication by increasing the polymerase's processibility during elongation of the leading strand (PubMed:35585232). 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 (PubMed:24695737). {ECO:0000269 PubMed:18719106, ECO:0000269 PubMed:19443450, ECO:0000269 PubMed:24695737, ECO:0000269 PubMed:24939902, ECO:0000269 PubMed:35585232}.</p>
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Molecular Weight:	28.8 kDa
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## Target Details

UniProt:	<a href="#">P12004</a>
Pathways:	<a href="#">Telomere Maintenance</a> , <a href="#">DNA Damage Repair</a> , <a href="#">Mitotic G1-G1/S Phases</a> , <a href="#">DNA Replication</a> , <a href="#">Synthesis of DNA</a> , <a href="#">Autophagy</a>

## Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months