

Anti-PCNA Antibody (aa61-110) Rabbit Anti Human Polyclonal Antibody Catalog # ALS18029

Specification

Anti-PCNA Antibody (aa61-110) - Product Information

Application Primary Accession Predicted Host Clonality Isotype Calculated MW WB, IHC-P, E <u>P12004</u> Human, Mouse, Rat Rabbit Polyclonal IgG 28769

Anti-PCNA Antibody (aa61-110) - Additional Information

Gene ID 5111

Alias Symbol **Other Names** PCNA, Cyclin **PCNA**

Target/Specificity PCNA Antibody detects endogenous levels of total PCNA protein.

Reconstitution & Storage Immunoaffinity purified

Precautions Anti-PCNA Antibody (aa61-110) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-PCNA Antibody (aa61-110) - Protein Information

Name PCNA

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).

Cellular Location

Nucleus Note=Colocalizes with CREBBP, EP300 and POLD1 to sites of DNA damage (PubMed:24939902). Forms nuclear foci representing sites of ongoing DNA replication and vary in morphology and number during S phase (PubMed:15543136). Co-localizes with SMARCA5/SNF2H and BAZ1B/WSTF at replication foci during S phase (PubMed:15543136). Together with APEX2, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents.

Anti-PCNA Antibody (aa61-110) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-PCNA Antibody (aa61-110) - Images