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Anti-PCNA Antibody (aa61-110)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18029

Product Information

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

Additional Information

Gene ID	5111
Alias Symbol	PCNA
Other Names	PCNA, Cyclin
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.

Protein Information

Name	PCNA
Function	Confers DNA tethering and processivity to DNA polymerases and other proteins (PubMed:24695737, PubMed:24939902, PubMed:35585232). Auxiliary protein of DNA polymerase delta and epsilon, is involved in the control of DNA replication by increasing the polymerases' processivity 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.