

Goat anti-PCNA (aa111-122), Biotinylated Antibody
Peptide-affinity purified goat antibody
Catalog # AF4477a**Specification**

Goat anti-PCNA (aa111-122), Biotinylated Antibody - Product Information

Application	WB, Pep-ELISA
Primary Accession	P12004
Other Accession	NP_002583.1
Reactivity	Human, Mouse, Rat, Pig, Dog, Bovine
Host	Goat
Clonality	Polyclonal
Calculated MW	28769

Goat anti-PCNA (aa111-122), Biotinylated Antibody - Additional Information**Gene ID** 5111**Other Names**

PCNA; proliferating cell nuclear antigen; MGC8367; DNA polymerase delta auxiliary protein; OTTHUMP00000030189; OTTHUMP00000030190; cyclin

DilutionWB~~1:1000
Pep-ELISA~~N/A**Format**

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen

Reported variants represent identical protein: NP_872590.1, NP_002583.1

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat anti-PCNA (aa111-122), Biotinylated Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat anti-PCNA (aa111-122), Biotinylated Antibody - 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

Goat anti-PCNA (aa111-122), Biotinylated Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat anti-PCNA (aa111-122), Biotinylated Antibody - Images