

PCNA
Rabbit Monoclonal Antibody (Mab)
Catalog # APA035

Specification

PCNA - Product Information

| | |
|-------------------|------------------------|
| Application | IHC |
| Primary Accession | P12004 |
| Host | Rabbit |
| Clonality | Monoclonal |
| Calculated MW | 28769 Da |

PCNA - Additional Information

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|-----------|------|
| Gene ID | 5111 |
| Gene Name | PCNA |

Other Names

Proliferating cell nuclear antigen, PCNA, Cyclin, PCNA

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|-------------|---|
| Storage | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| Precautions | PCNA is for research use only and not for use in diagnostic or therapeutic procedures. |

PCNA - Protein Information

Name PCNA

| | |
|----------|--|
| Function | 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 |
|----------|--|

Cellular Location

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](#)). 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.

PCNA - 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](#)

PCNA - Images