

Anti-PCNA Antibody (clone PC10)
Mouse Anti Human Monoclonal Antibody
Catalog # ALS17848**Specification**

Anti-PCNA Antibody (clone PC10) - Product Information

Application	WB, IHC-P, IHC-F, IP, Flo
Primary Accession Predicted	P12004 Human, Mouse, Rat, Rabbit, Hamster, Chicken, Rhesus, Sheep, Xenopus, Horse, Dog, Cat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Calculated MW	28769

Anti-PCNA Antibody (clone PC10) - Additional Information**Gene ID 5111**

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

Target/Specificity

Recognizes the proliferating cell nuclear antigen, also known as PCNA or cyclin. PCNA is a 261 amino acid ~28 kD nuclear protein vital for cellular DNA synthesis at the replication fork through its interaction with. PCNA is the auxilliary protein for ...

Reconstitution & Storage

Purified

Precautions

Anti-PCNA Antibody (clone PC10) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-PCNA Antibody (clone PC10) - 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 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. Together with APEX2, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents

Anti-PCNA Antibody (clone PC10) - 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](#)