



## **PCNA**

Rabbit Monoclonal antibody(Mab)
Catalog # AD80035

## **Specification**

## **PCNA - Product info**

Application IHC-P
Primary Accession P12004
Reactivity Human
Host Rabbit
Clonality Monoclonal
Calculated MW 28769

#### **PCNA - Additional info**

Gene ID 5111
Gene Name PCNA

**Other Names** 

Proliferating cell nuclear antigen, PCNA, Cyclin, PCNA

**Dilution** 

IHC-P~~Ready-to-use

Storage

Maintain refrigerated at 2-8°C

Precautions PCNA Antibody 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



Cellular Location

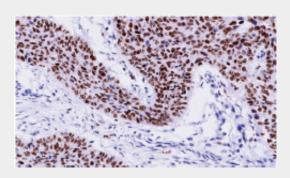
pathways (PubMed: 24939902). Acts as a loading platform to recruit DDR proteins that allow completion of DNA replication after DNA damage and promote postreplication repair: Monoubiquitinated **PCNA** leads to recruitment of translesion (TLS) polymerases, while 'Lys-63'-linked polyubiquitination of PCNA is involved in error-free pathway and employs recombination mechanisms to synthesize across the lesion (PubMed:24695737). 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.

#### **PCNA - Protocols**

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

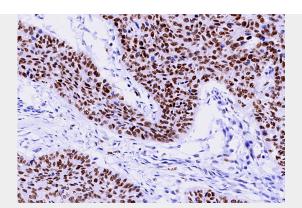
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **PCNA - Images**



Lung squamous cell carcinoma





Immunohistochemical analysis of paraffin-embedded papillary thyroid carcinoma; tissue using AD80035 performed on the Abcarta® FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(Ready-to-use) for 15 min at room temperature. AmpSeeTM Detection Systems Abcepta: AR005 was used as the secondary antibody.