

PCNA Antibody (C-term)
Mouse Monoclonal Antibody (Mab)
Catalog # AM2237b

Specification

PCNA Antibody (C-term) - Product Information

Application	WB, IHC, IHC-P, E
Primary Accession	P12004
Other Accession	P04961 , P61258 , P57761 , Q3ZBW4
Reactivity	Human, Mouse, Rat
Predicted	Bovine, Hamster, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	28769
Antigen Region	236-261

PCNA Antibody (C-term) - Additional Information

Gene ID 5111

Other Names

Proliferating cell nuclear antigen, PCNA,
Cyclin, PCNA

Target/Specificity

This PCNA antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 236-261 amino acids from the C-terminal region of human PCNA.

Dilution

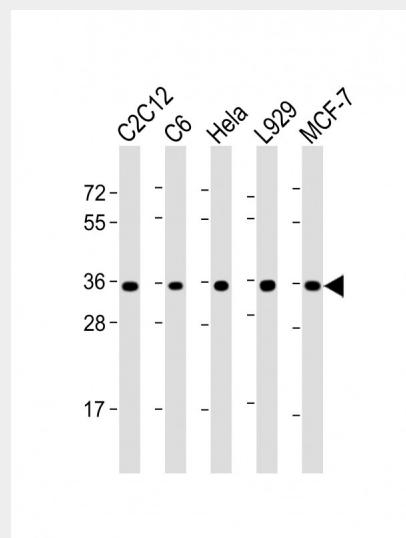
WB~~1:2000
IHC~~1:2000
IHC-P~~1:25

Format

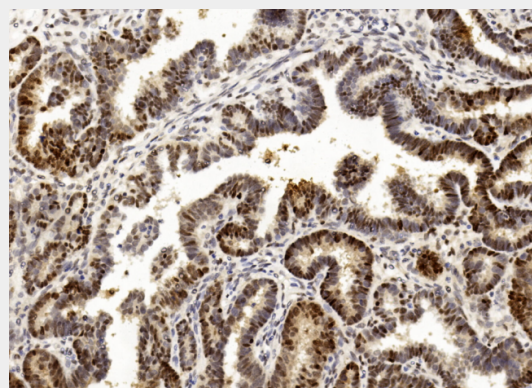
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

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.



All lanes : Anti-PCNA Antibody (C-term) at 1:2000 dilution Lane 1: C2C12 whole cell lysate Lane 2: C6 whole cell lysate Lane 3: HeLa whole cell lysate Lane 4: L929 whole cell lysate Lane 5: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded Human Ovarian cancer section using Pink1(Cat#AM2237b). AM2237b was diluted at 1:2000 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB

Precautions

PCNA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PCNA Antibody (C-term) - Protein Information

Name PCNA

Function

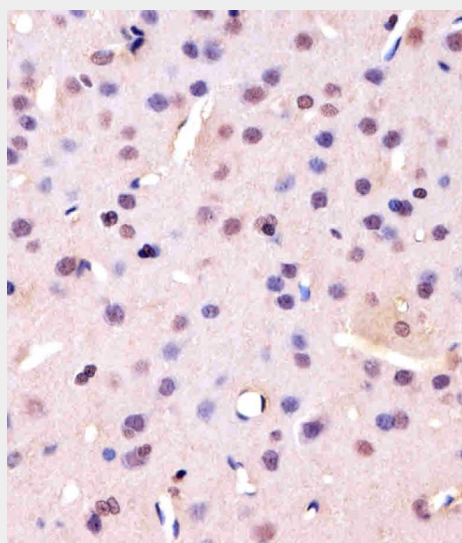
Auxiliary protein of DNA polymerase delta and is involved in the control of eukaryotic DNA replication by increasing the polymerase's processibility during elongation of the leading strand. Induces a robust stimulatory effect on the 3'-5' exonuclease and 3'-phosphodiesterase, but not apurinic-aprimidinic (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

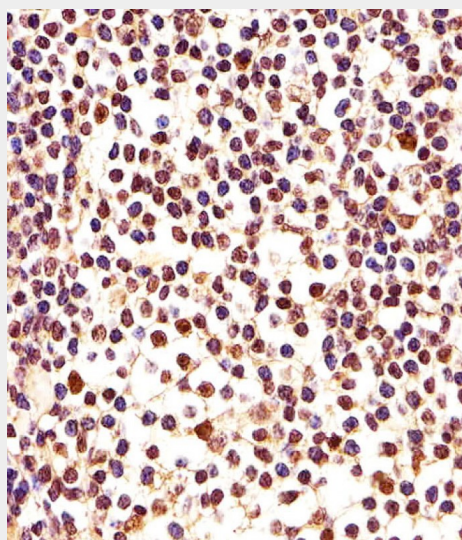
Nucleus. Note=Colocalizes with CREBBP, EP300 and POLD1 to sites of DNA damage (PubMed:24939902). Forms nuclear foci representing sites of ongoing DNA replication and vary in morphology and number during S phase. Together with APEX2, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents

PCNA Antibody (C-term) - Protocols

staining.



AM2237b staining PCNA in Rat brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded H. lymph section using PCNA Antibody (C-term) (Cat#AM2237B). AM2237B was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

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 Antibody (C-term) - Background

This protein is an 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.

PCNA Antibody (C-term) - References

Almendral J.M., et al. Proc. Natl. Acad. Sci. U.S.A. 84:1575-1579(1987).
Travali S., et al. J. Biol. Chem. 264:7466-7472(1989).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Deloukas P., et al. Nature 414:865-871(2001).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.