

PCNA Antibody

Catalog No: #33468

Package Size: #33468-1 50ul #33468-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

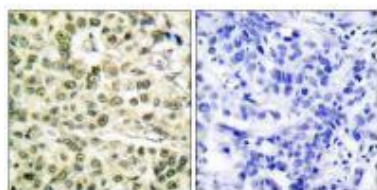
Product Name	PCNA Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous levels of total PCNA protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from human PCNA.
Conjugates	Unconjugated
Target Name	PCNA
Other Names	cyclin; proliferating cell nuclear antigen;
Accession No.	Swiss-Prot: P12004NCBI Gene ID: 5111
SDS-PAGE MW	36kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

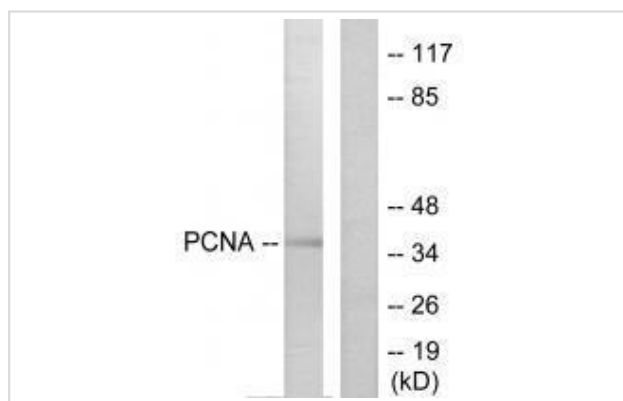
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

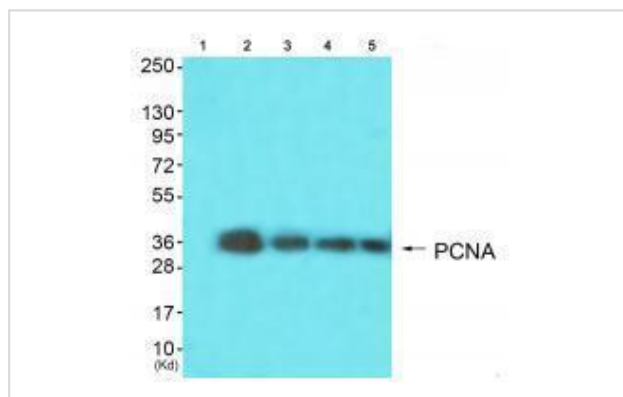
Images



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using PCNA antibody #33468.



Western blot analysis of extracts from HepG2 cells, using PCNA antibody #33468.



Western blot analysis of extracts from HeLa cells (Lane 2), colo cells (Lane 3), HepG2 cells (Lane 4) and 293 cells (Lane 5) using PCNA antibody #33468. The lane on the left is treated with synthesized peptide.

Background

Auxiliary protein of DNA polymerase delta and is involved in the control of eukaryotic DNA replication by increasing the polymerase's processivity 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. 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.

Anje Sporbart, *Nucleic Acids Res.*, Jun 2005; 33: 3521 - 3528.

Sean C. Gehen, *Am J Physiol Lung Cell Mol Physiol*, Mar 2007; 292: L716 - L724.

Basavaraj Bagewadi, *J. Virol.*, Nov 2004; 78: 11890 - 11903.

T Iida, *I Suetake, Genes Cells*, Oct 2002; 7: 997 -

Published Papers

Zhipeng Zhang; Yanmei Wu; Wenqiang Liang; Zhifang Liao; Hongbo Liao; Xingxing Xing; Wenxin Yi; Zixuan Liu; Yicheng Li; Mengya Shi; Dongling Lin; Ting Gu; Biao Wu; Mingzhi Zou; Huilai Miao; Xin Wu et al., Eurycomalactone switched hepatocellular carcinoma cells into quiescence through 5'tRFAla/DVL/ β -catenin pathway inhibition., (2025)

[PMID:40128187](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.