



# PCNA Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-16766                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Reactivity</b>                  | Human;Mouse;Rat;Monkey;Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Gene Name</b>                   | PCNA                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human PCNA. AA range:61-110                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Specificity</b>                 | PCNA Polyclonal Antibody detects endogenous levels of PCNA protein.                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                               |
| <b>Dilution</b>                    | WB 1:500-2000;IHC-p 1:100-500;IF/ICC 1:100-500;ELISA 1:5000-20000                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Synonyms</b>                    | Cyclin;proliferating cell nuclear antigen;PCNA                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Observed Band</b>               | 30-33kd                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Calculated Molecular Weight</b> | 30-33kd                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Cell Pathway</b>                | Nucleus . 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. .               |
| <b>Tissue Specificity</b>          | Bone marrow,Fetal brain cortex,Lung,Placenta,                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Function</b>                    | disease:Antibodies are present in sera from patients with systemic lupus erythematosus.,function: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.,online information:PCNA entry,PTM:Upon methyl methanesulfonate-induced DNA damage, mono-ubiquitinated by the UBE2B-RAD18 complex on Lys-164. This |

induces non-canonical poly-ubiquitination on Lys-164 through 'Lys-63' linkage of ubiquitin moieties by the E2 complex UBE2N-UBE2V2 and the E3 ligases RNF8 and SHPRH, which are required for DNA repair.,similarity:Belongs to the PCNA family.,subunit:Homotrimer. Interacts with KCTD10. Interacts with PPP1R15A (By similarity). Forms a complex with activator 1 heteropentamer in the presence of ATP. Interacts with POLH, POLK, DNMT1, ERCC5/XPG, FEN1, C

**Background**

The protein encoded by this gene is found in the nucleus and is a cofactor of DNA polymerase delta. The encoded protein acts as a homotrimer and helps increase the processivity of leading strand synthesis during DNA replication. In response to DNA damage, this protein is ubiquitinated and is involved in the RAD6-dependent DNA repair pathway. Two transcript variants encoding the same protein have been found for this gene. Pseudogenes of this gene have been described on chromosome 4 and on the X chromosome. [provided by RefSeq, Jul 2008],

**matters needing attention**

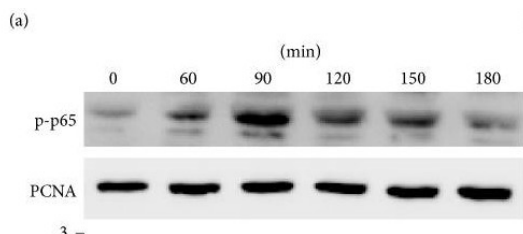
Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

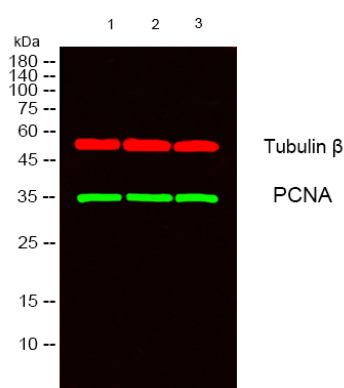


## Products Images

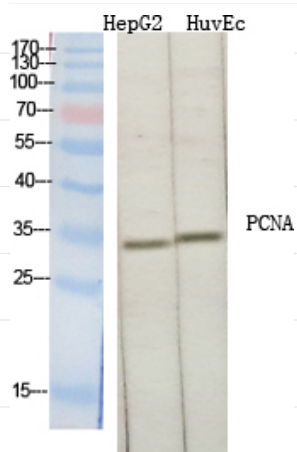


(b)

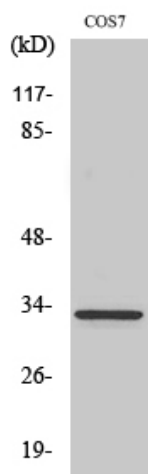
Yan, Jinchuan, et al. "CD137 regulates NFATc1 expression in mouse VSMCs through TRAF6/NF- $\kappa$ B p65 signaling pathway." *Mediators of inflammation* 2015 (2015).



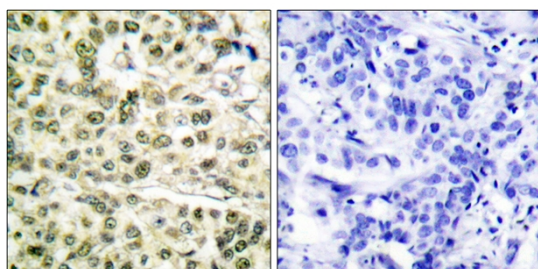
Western blot analysis of lysates from 1) HepG2, 2) HuvEC, 3) COS7 cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) Tubulin  $\beta$  Monoclonal Antibody(5G3) (cat:YM3030) antibody was diluted at 1:5000 as loading control, 4° over night,secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.



Western Blot analysis of various cells using PCNA Polyclonal Antibody diluted at 1:2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



Western Blot analysis of COS7 cells using PCNA Polyclonal Antibody diluted at 1:2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using PCNA Antibody. The picture on the right is blocked with the synthesized peptide.