

PCNA mouse mAb

Catalog No :	YM1381
Reactivity :	Human;Mouse;Monkey;Rat;Hamster
Applications :	WB;IP;ICC;IHC
Target :	PCNA
Fields :	>>DNA replication;>>Base excision repair;>>Nucleotide excision repair;>>Mismatch repair;>>Cell cycle;>>Tight junction;>>Hepatitis B
Gene Name :	pcna
Human Gene Id :	5111
Human Swiss Prot No :	P12004
Mouse Swiss Prot No :	P17918
Immunogen :	Purified recombinant human PCNA protein fragments expressed in E.coli.
Specificity :	This antibody detects endogenous levels of PCNA and does not cross-react with related proteins.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	wb dilution 1:1000 icc dilution 1:100
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	30-33kd

Cell Pathway : DNA replication;Base excision repair;Nucleotide excision repair;Mismatch repair;Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;

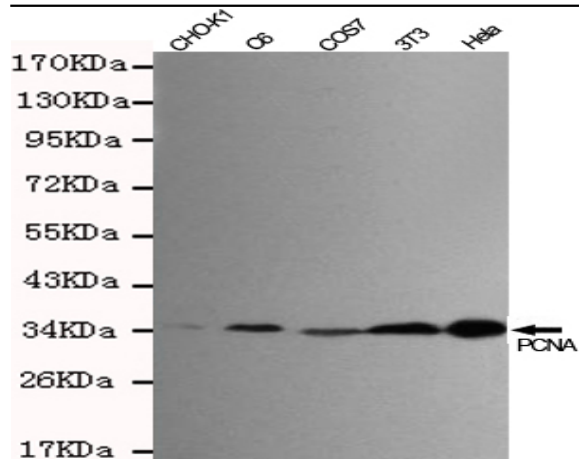
Background : The protein encoded by this gene is found in the nucleus and is a cofactor of DNA polymerase delta. The encoded protein acts as a homotrimer and helps increase the processivity of leading strand synthesis during DNA replication. In response to DNA damage, this protein is ubiquitinated and 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],

Function : 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

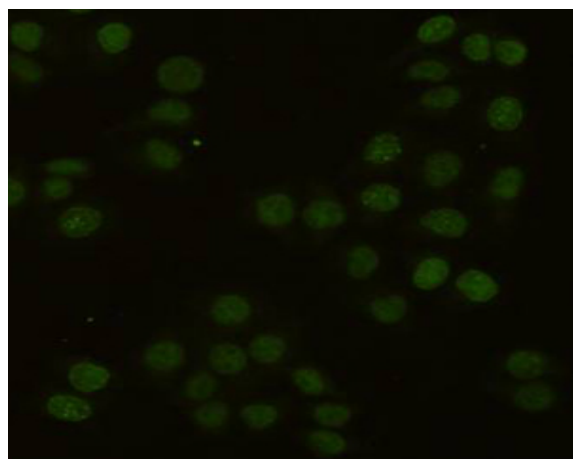
Subcellular Location : Nucleus . Colocalizes with CREBBP, EP300 and POLD1 to sites of DNA damage (PubMed:24939902). Forms nuclear foci representing sites of ongoing DNA replication and vary in morphology and number during S phase (PubMed:15543136). Co-localizes with SMARCA5/SNF2H and BAZ1B/WSTF at replication foci during S phase (PubMed:15543136). Together with APEX2, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents. .

Expression : Bone marrow,Fetal brain cortex,Lung,Placenta,

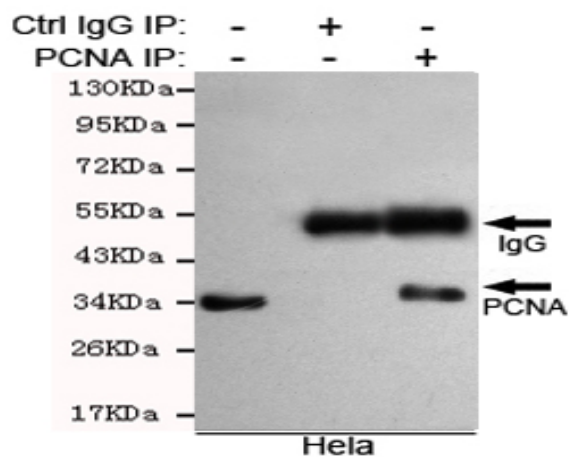
Products Images



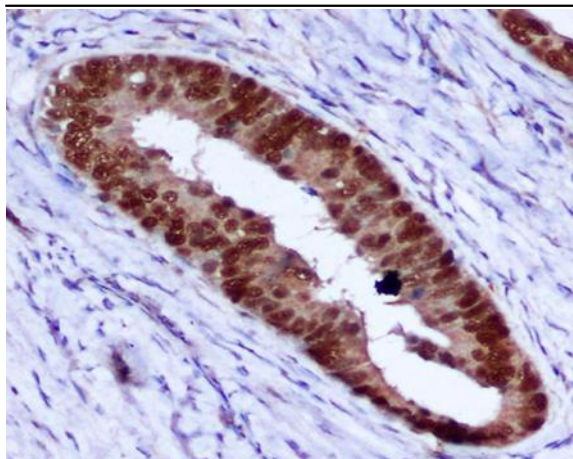
Western blot detection of PCNA in HeLa, 3T3, COS7, C6 and CHO-K1 cell lysates using PCNA mouse mAb (1:1000 diluted). Predicted band size: 36 kDa. Observed band size: 36 kDa.



Immunocytochemistry staining of HeLa cells using PCNA mouse mAb (dilution 1:100). Fixed in 100% methanol for 2 hr at -20°C.



Immunoprecipitation analysis of HeLa cell lysates using PCNA mouse mAb.



Immunohistochemical analysis of paraffin-embedded human colorectal carcinoma with PCNA mouse mAb (2E1-G10-H10, 1:400 diluted), showing nuclear localization. A high pressure mediated antigen retrieval step was performed in citrate buffer (pH 6.0).