



PCNA Monoclonal Antibody(12D10)

Catalog No	YP-Ab-16576
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB;IF;IHC
Gene Name	PCNA
Protein Name	Proliferating cell nuclear antigen
Immunogen	Synthetic Peptide of PCNA
Specificity	The antibody detects endogenous PCNA protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB: 1:5000 IHC: 1:200 IF 1:200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PCNA; Proliferating cell nuclear antigen; PCNA; Cyclin
Observed Band	30-33kd
Cell Pathway	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. .
Tissue Specificity	Bone marrow,Fetal brain cortex,Lung,Placenta,
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

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

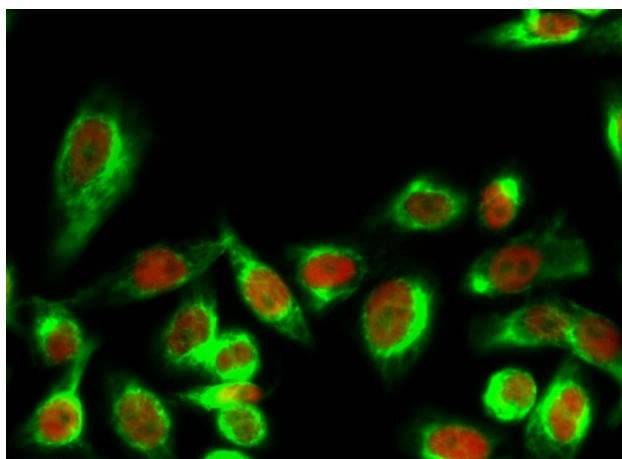
Avoid repeated freezing and thawing!

Usage suggestions

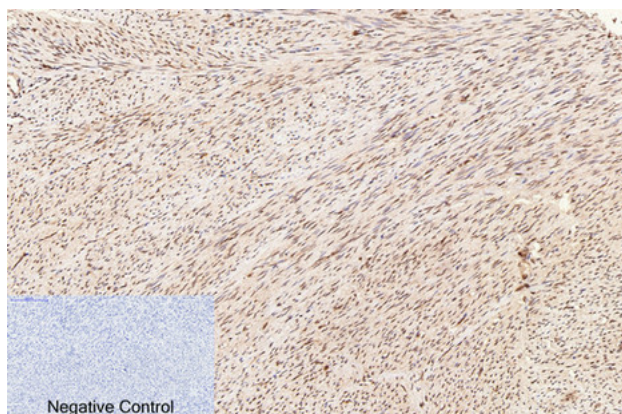
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



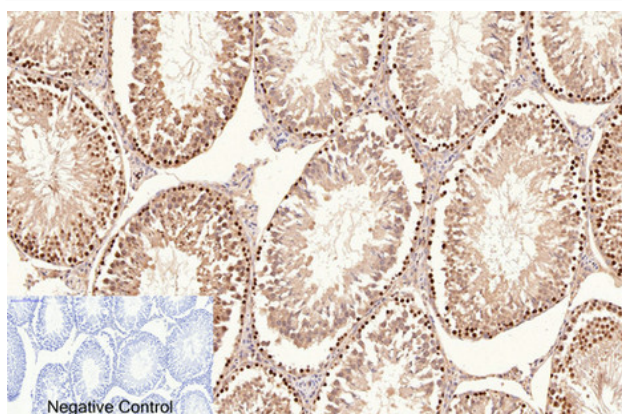
Products Images



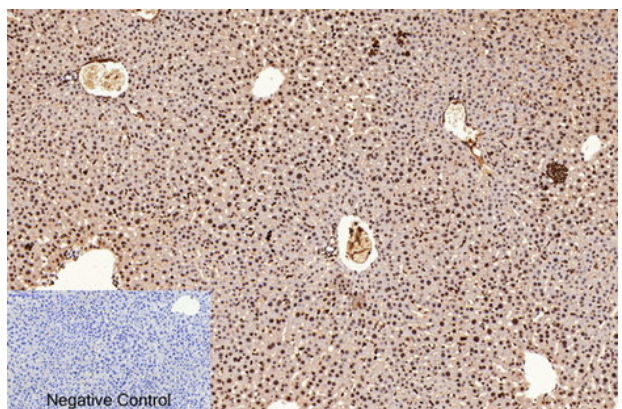
Immunofluorescence analysis of Hela cell. 1, 14-3-3 θ /r (phospho Ser232) Polyclonal Antibody (green) was diluted at 1:200 (4° overnight). (red) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog: RS3608 was diluted at 1:1000 (room temperature, 50min).



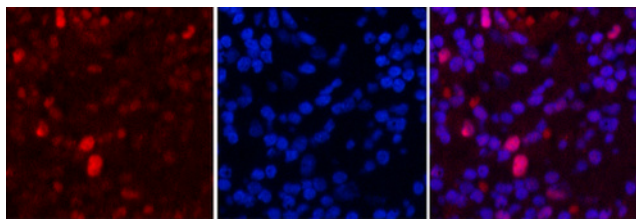
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1, PCNA Monoclonal Antibody (12D10) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-testis tissue. 1, PCNA Monoclonal Antibody (12D10) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1, PCNA Monoclonal Antibody (12D10) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



A

B

C

Immunofluorescence analysis of Human-lung-cancer tissue. 1, PCNA Monoclonal Antibody (12D10) (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B