For Research Use Only

Biotin-conjugated PCNA Monoclonal antibody



Purification Method:

Protein G purification

Recommended Dilutions:

IHC 1:1000-1:4000

CloneNo.:

10D10E11

Positive Controls:

IHC: human gliomas tissue,

Catalog Number: Biotin-60097

Featured Product

2 Publications

BC000491

GenBank Accession Number:

Basic Information

Catalog Number: Biotin-60097

 Size:
 GeneID (NCBI):

 500 μ g/ml
 5111

 Source:
 UNIPROT ID:

 Mouse
 P12004

Isotype: Full Name:
IgG1 proliferating cell nuclear antigen

Immunogen Catalog Number:Calculated MW:AG741629 kDa/31 kDaObserved MW:

36-38 kDa

Applications

Tested Applications:

IHC

Cited Applications:

WB

Species Specificity: human, mouse, pig, rat Cited Species:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Proliferating Cell Nuclear Antigen, commonly known as PCNA, is a protein that acts as a processivity factor for DNA polymerase δ in eukaryotic cells. 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. PCNA induces a robust stimulatory effect on the 3'-5' exonuclease and 3'-phosphodiesterase, but not apurinic-apyrimidinic (AP) endonuclease, APEX2 activities. It has to be loaded onto DNA in order to be able to stimulate APEX2. PCNA protein is highly conserved during evolution; the deduced amino acid sequences of rat and human differ by only 4 of 261 amino acids. PCNA has been used as loading control for proliferating cells. The calculated molecular weight of PCNA is 29 kDa, but modified PCNA is 36kDa (PMID: 1358458).

Notable Publications

Author	Pubmed ID	Journal	Application
Huizhen Wang	34789720	Cell Death Dis	WB
Jialin Chen	39512422	Bioact Mater	WB

Storage

Storage

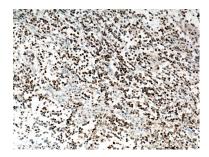
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffe

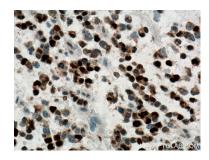
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunohistochemical analysis of paraffinembedded human gliomas tissue slide using Biotin-60097 (PCNA antibody) at dilution of 1:2000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human gliomas tissue slide using Biotin-60097 (PCNA antibody) at dilution of 1:2000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).