EpiDtect™

PCNA Primary Antibody

Clone: PC10 (Mouse Monoclonal)

Localization – Nucleus
Host Species – Mouse
Ig Class – IgG2a, kappa

ORDERING INFORMATION	
CATALOG#	**DESCRIPTION**
DH553-01C	0.1 ML Concentrated Antibody Vial
DH553-05C	0.5 ML Concentrated Antibody Vial
DH553-1C	1 ML Concentrated Antibody Vial
DH553-3R	3 ML Ready-to-Use Antibody Vial
DH553-6R	6 ML Ready-to-Use Antibody Vial
DH553-12R	12 ML Ready-to-Use Antibody Vial

Intended Use

This antibody is designed for the specific localization of PCNA in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

Storage & Handling

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

Working Principle

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using anual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

Product Description

Proliferating Cell Nuclear Antigen (PCNA), also known as the polymerase δ auxiliary protein, is a pivotal component of DNA replication and DNA repair processes, including nucleotide excision repair and mismatch repair. PCNA functions as a nuclear protein and serves as a processivity factor for DNA polymerase δ, assembling as a homotrimeric sliding clamp that enhances the efficiency of leading-strand DNA synthesis. Beyond its role in replication, PCNA interacts with several regulatory and repair proteins, including the CDK inhibitor p21, structure-specific endonucleases such as Fen1 and XPG, and DNA cytosine-5-methyltransferase (MCMT), thereby integrating cell cycle regulation with DNA repair and epigenetic maintenance. PCNA expression is closely associated with proliferative activity, rendering it a valuable biomarker for assessing cell proliferation and the prognostic evaluation of neoplastic tissues. It is predominantly expressed during the early G1 and S phases of the cell cycle. In response to DNA damage, PCNA undergoes ubiquitination, participating in RAD6-dependent DNA damage tolerance pathways. Two transcript variants encoding the identical protein have been identified, and pseudogenes of PCNA have been described on chromosome 4 and the X chromosome

Material Supplied

PCNA antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

Material required But Not Supplied

- Xylene
- DI Water
- Control Tissues
- Isopropyl alcohol
- Antigen retrieval buffers
- Hematoxylin
- Positive charged slides
- Blocking Reagents
- Mounting media
- Wash Buffer
- Detection System
- Cover glass

Working Reagent Procedure

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

Recommended Protocol

Refer the following table for the details on specific recommended protocol for this antibody.

Control Tissue	Tonsil or reactive lymph node
Dilution factor	**1:20-50** (Antibody Diluent: DH144)

Antibody Incubation Time	30-60 Minutes at RT
Retrieval Pre-treatment	**Tris-EDTA based HIER** (AR9 Buffer: DH020)

Precautions

This product should be used by qualified and trained professional users only.
Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contain sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.

Limitations

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

Troubleshooting

For Technical Support contact us at +91 - *7506501122* or *info@dygnova.com* or your local distributor to report unusual staining.

Doc No: *DH/DS/PRL535Rev.00*

	Manufacturer Details		Use by Date	LOT	Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use	REF	Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests	IVD	In-vitro Diagnostic Medical Device

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