

**PCNA (Proliferating Cell Nuclear Antigen) Ab-1 (Clone PC10)**

Mouse Monoclonal Antibody

**Cat. #MS-106-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 20µg/ml)** (Purified Ab with BSA and Azide)**Cat. #MS-106-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml)** (Purified Ab without BSA and Azide)**Cat. #MS-106-B0, -B1, or -B (0.1ml, 0.5ml, or 1.0ml at 20µg/ml)** (Biotin-Labeled Ab with BSA and Azide)**Cat. #MS-106-R7 (7.0ml)** (Ready-to-Use for Immunohistochemistry)**Cat. #MS-106-PCS (5 Slides)** (Positive Control for Histology)**Cat. #MS-106-PCL (0.1ml)** (Positive Control for Western Blot)**Please note this data sheet has been changed effective March 23, 2012.**

**Description:** Expression of proliferating cell nuclear antigen (PCNA) or cyclin or polymerase delta auxiliary protein is elevated in the nucleus during late G<sub>1</sub> phase immediately before the onset of DNA synthesis, becoming maximal during S-phase and declining during G<sub>2</sub> and M phases. Its level correlates directly with rates of cellular proliferation and DNA synthesis. PCNA/cyclin may act as an auxiliary protein of DNA polymerase-delta to play a fundamental role in the initiation of cell proliferation

**Comments:** CDC47 Ab-2 (Cat.# MS-862-P) provides a better proliferation index in murine tissues.

**Mol. Wt. of Antigen:** 36kDa

**Epitope:** Not determined

**Species Reactivity:** Human, Mouse, Rat, Insect, and Yeast. Others-not known.

**Clone Designation:** PC10

**Ig Isotype / Light Chain:** IgG<sub>2a</sub> / κ

**Immunogen:** Recombinant rat PCNA protein

**Applications and Suggested Dilutions:**

- Flow Cytometry
- Immunoprecipitation (Native and denatured) (Use Protein A) (Ab at 2µg/mg protein lysate)
- Western Blotting (Ab 1:50 for 2hrs at RT)
- Immunohistology (Formalin/paraffin) (Ab **1:200-400** for 20 min at RT using the LP Detection System)

\* (No special pretreatment is required for immunohistochemistry of formalin/paraffin tissues.)

The optimal dilution for a specific application should be determined by the investigator.

**Positive Control:** Raji cells. Tonsil, lymph node, or small intestine

**Cellular Localization:** Nuclear

**Supplied As:**

20µg/ml of antibody purified from ascites fluid by Protein A chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml. Or Prediluted antibody which is

ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

**Storage and Stability:**

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

**Key References:**

1. Waseem N and Lane D. (1990) J Cell Sci 96:121-129
2. Hall P A, et al. (1990) J Path 162:285-294.
3. Woods A L, et al. (1991) Histopathol 19:21-27.
4. Yu C C, et al (1991) Histopathol 19:29-33.
5. Jain S, et al(1991) J Clin Pathol 44:655-659.

**Limitations and Warranty:**

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Lab Vision is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

**Material Safety Data:**

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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