



Antibodies

1P-182-T100

## Monoclonal Antibody to PCNA Phycoerythrin (PE) conjugated (100 tests)

<b>Clone:</b>	PC10
<b>Isotype:</b>	Mouse IgG2a
<b>Specificity:</b>	The mouse monoclonal antibody PC10 (also known as 3F81) recognizes PCNA, a 36 kDa conserved nuclear protein serving as a cofactor for DNA synthesis.
<b>Immunogen:</b>	recombinant rat PCNA
<b>Species Reactivity:</b>	Human, Non-Human Primates, Mouse, Rat, Chicken, Drosophila
<b>Preparation:</b>	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	PCNA (proliferating cell nuclear antigen), which is the DNA polymerase delta auxiliary protein acting in homotrimeric form to increase the processivity of leading strand synthesis during DNA replication. PCNA is expressed in the nucleus of all proliferating cells. In response to DNA damage, it is ubiquitinated and is involved in the RAD6-dependent DNA repair pathway. PCNA is a useful marker of DNA synthesis, as its form not involved in DNA synthesis degrades in histological preparations in the presence of organic solvents.
<b>References:</b>	*Landberg G, Roos G: Antibodies to proliferating cell nuclear antigen as S-phase probes in flow cytometric cell cycle analysis. <i>Cancer Res.</i> 1991 Sep 1;51(17):4570-4. *Malkas LH, Herbert BS, Abdel-Aziz W, Dobrolecki LE, Liu Y, Agarwal B, Hoelz D, Badve S, Schnaper L, Arnold RJ, Mechref Y, Novotny MV, Loehrer P, Goulet RJ, Hickey RJ: A cancer-associated PCNA expressed in breast cancer has implications as a potential biomarker. <i>Proc Natl Acad Sci U S A.</i> 2006 Dec 19;103(51):19472-7. *Dahm K, Hübscher U: Colocalization of human Rad17 and PCNA in late S phase of the cell cycle upon replication block. <i>Oncogene.</i> 2002 Oct 31;21(50):7710-9.

**For laboratory research only, not for drug, diagnostic or other use.**