

# Product Data Sheet

## PE anti-human/mouse/rat PCNA

**Catalog # / Size:** 307908 / 100 tests

**Clone:** PC10

**Isotype:** Mouse IgG2a,  $\kappa$

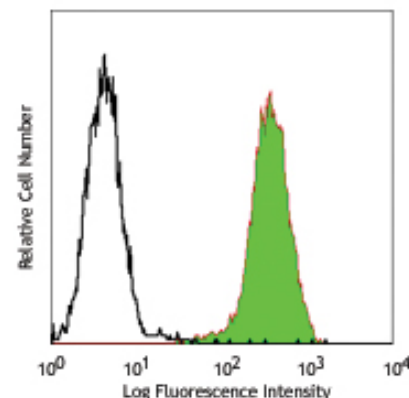
**Immunogen:** Recombinant rat PCNA

**Reactivity:** Human, Mouse, Rat, **Cross-Reactivity:** Other species

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



MOLT-4 cells fixed in 70% ethanol then stained with PC10 PE

## Applications:

**Applications:** ICFC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent intracellular staining with flow cytometric analysis. Please follow the Cell Fixation and Permeabilization Protocol Using 70% Ethanol.

**Test size products are transitioning from 20  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining<sup>2,5,6</sup> of acetone-fixed frozen sections and formalin-fixed paraffin-embedded tissue sections, immunoprecipitation, intracellular flow cytometry<sup>3</sup>, immunofluorescence microscopy<sup>9</sup>, and Western blotting<sup>10</sup>.

- Application References:**
1. Ogata K, *et al.* 1985. *J. Immunol.* 135:2623.
  2. Garcia R, *et al.* 1989. *Am. J. Pathol.* 134:733.
  3. Landberg G, *et al.* 1990. *Exp. Cell. Res.* 187:111.
  4. Waseem N, *et al.* 1990. *J. Cell Sci.* 96:121.
  5. Yu C, *et al.* 1991. *Histopathology* 19:29.
  6. Wilkins B, *et al.* 1992. *J. Pathol.* 166:45.
  7. Yang W, *et al.* 1996. *Human Pathol.* 27:70.
  8. Galkowska H, *et al.* 1996. *Vet. Immunol. Immunopathol.* 53:329.
  9. Chou HYE, *et al.* 2006. *J. Biol. Chem.* 10:1074.
  10. Fulvio MD, *et al.* 2006. *Oncogene* 25:3932.
  11. Eswarakumar VP and Schlessinger J. 2007. *Proc. Natl. Acad. Sci. USA* 104:3937.

**Description:** The PC10 monoclonal antibody reacts with proliferating cell nuclear antigen also known as PCNA or the DNA polymerase  $\delta$  auxiliary protein. PCNA is a 36 kD trimeric ring that acts as a DNA-polymerase sliding clamp expressed in the nucleus of all proliferating cells. A prime function of PCNA appears to be increasing DNA polymerase  $\delta$  processibility during elongation of the leading strand. PCNA is a useful marker for DNA synthesis and is highly conserved among most species, thus highlighting the very broad reactivity of this antibody.

- Antigen References:**
1. Travali S, *et al.* 1989. *J. Biol. Chem.* 264:7466.
  2. Waseem N, *et al.* 1990. *J. Cell Sci.* 96:121.
  3. Hall P, *et al.* 1990. *J. Pathol.* 162:285.
  4. Landberg G, *et al.* 1991. *Cancer Res.* 51:4570.
  5. Woods A, *et al.* 1991. *Histopathol.* 19:21.
  6. Hoege C, *et al.* 2002. *Nature* 419:135.
  7. Yue H, *et al.* 2003. *World J. Gastroenterol.* 9:377.
  8. Shan B, *et al.* 2003. *J. Biol. Chem.* 278:44009.

**Related Products:**

Product	Clone	Application
PE Mouse IgG2a, $\kappa$ Isotype Ctrl	MOPC-173	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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