
Biotin anti-human/mouse/rat PCNA

Catalog # / Size:	2139520 / 100 µg
Clone:	PC10
Isotype:	Mouse IgG2a, κ
Immunogen:	Recombinant rat PCNA
Reactivity:	Rat
Preparation:	The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.5

Applications:

Applications: Immunofluorescence

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. For flow cytometric staining, the suggested use of this reagent is ≤0.125 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining^{2,5,6} of acetone-fixed frozen sections and formalin-fixed paraffin-embedded tissue sections, immunoprecipitation, intracellular flow cytometry³, immunofluorescence microscopy⁹, and Western blotting¹⁰.

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.
12. Spector I, *et al.* 2012. *PLoS One.* 7:e41833. [PubMed.](#)
13. Kim JH, *et al.* 2012. *Immunol Lett.* 147:18. [PubMed.](#)
14. Satchi-Fainaro R, *et al.* 2012. *PLoS One.* 7:e44395. [PubMed.](#)

Description: The PC10 monoclonal antibody reacts with proliferating cell nuclear antigen also known as PCNA or the DNA polymerase δ 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 δ 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** 1. Travali S, *et al.* 1989. *J. Biol. Chem.* 264:7466.
- References:** 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.