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Product Data Sheet

PE anti-human/mouse/rat PCNA

Catalog # / Size: 307908 / 100 tests

Clone: PC10

Isotype: Mouse IgG2a, κ

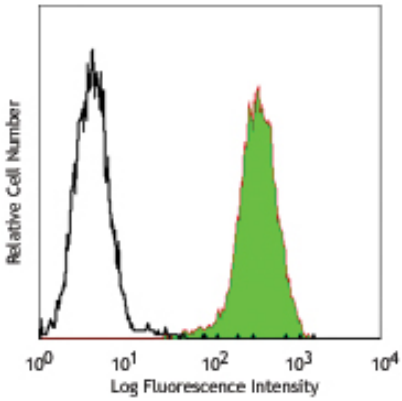
Immunogen: Recombinant rat PCNA

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 between 2°C and 8°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 µl to 5 µl per test. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

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 cytometry[3], immunofluorescence microscopy[9], and Western blotting[10].

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. Kumsiri R, *et al.* 2010. *Acta Trop.* 116:217. 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 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, κ 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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