

Product Data Sheet

Alexa Fluor® 488 anti-human/mouse/rat PCNA

Catalog # / Size: 307909 / 25 tests

Clone: PC10

Isotype: Mouse IgG2a, κ

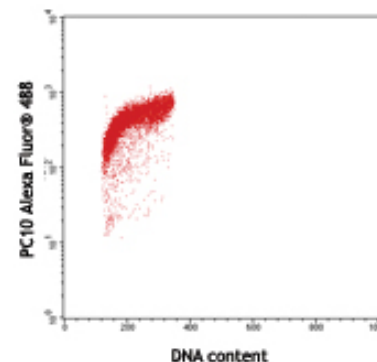
Immunogen: Recombinant rat PCNA

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

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

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 Alexa Fluor® 488 or MOPC-173 Alexa Fluor® 488

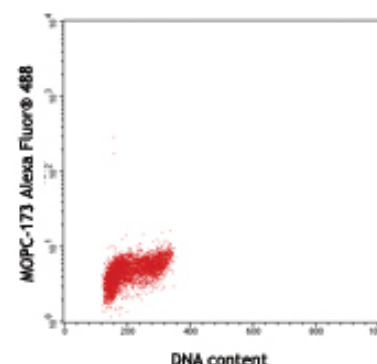
Applications:

Applications: ICFC - *Quality tested*
IF

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 immunofluorescent staining, the suggested use of this reagent is 5 μ l per million cells or 5 μ l per 100 μ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

** Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.



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. Horton NC, *et al.* 2013. *PLoS One.* 8:e59552. 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.



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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
	Cell Staining Buffer		FC, ICC, ICFC
	Alexa Fluor® 488 Mouse IgG2a, κ	MOPC-173	ICFC
	Isotype Ctrl (ICFC)		
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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