BioLegend®
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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

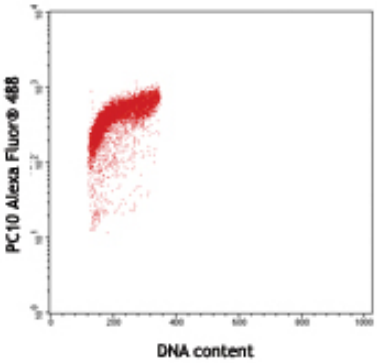
Reactivity: Human, Mouse, Rat, **Cross-Reactivity:** Other species

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

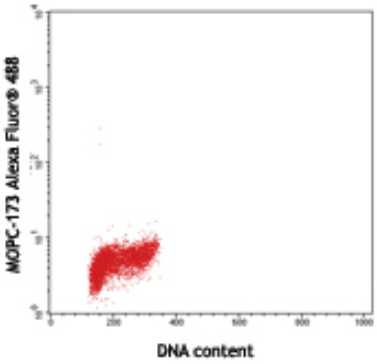
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific (please contact technical support for concentration and total µg amount, or use our Lookup tool if you have a lot number.)

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 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 flow cytometric staining, the suggested use of this reagent is 5 µl per million cells or 5 µl per 100 µl 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.

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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. 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.

Other Names: Proliferating Cell Nuclear Antigen, DNA Polymerase δ Auxiliary Protein

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.

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

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