BioLegend
The path to legendary discovery™

Product Data Sheet

Biotin anti-human/mouse/rat PCNA

Catalog # / Size: 307904 / 100 µg
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 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 mg/ml
Storage: The antibody solution should be stored undiluted between 2°C and 8°C. **Do not freeze.**

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 ≤0.125 µg per million cells in 100 µl 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 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. 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 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
Biotin Mouse IgG2a, κ Isotype Ctrl	MOPC-173	FC, ICFC
FITC Streptavidin		FC, ICFC
HRP Streptavidin		ELISA, ELISPOT, IHC, WB
PE Streptavidin		FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 9727 Pacific Heights Blvd, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587