SONY

Product Data Sheet

Purified anti-human/mouse/rat PCNA

Catalog # / Size: 2139505 / 25 µg
2139510 / 100 µg

Clone: PC10

Isotype: Mouse IgG2a, κ

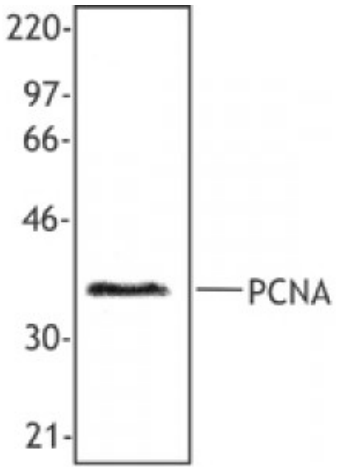
Immunogen: Recombinant rat PCNA

Reactivity: Rat

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH7.2, containing 0.09% sodium azide.

Concentration: 0.5



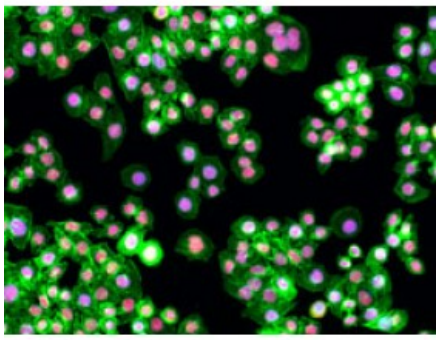
Hela cell nuclear extract was resolved by electrophoresis, transferred to nitrocellulose and probed with monoclonal anti-PCNA antibody. Proteins were visualized using a goat anti-mouse secondary conjugated to HRP and a chemiluminescence detection system.

Applications:

Applications: Other

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent intracellular staining with flow cytometric analysis. Please follow theCell 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 microscopy[9], and Western blotting[10].



HeLa cells were fixed with 1% paraformaldehyde (PFA) for 10 minutes, permeabilized with 0.5% Triton X-100 for 10 minutes, and blocked with 5% FBS for 30 minutes. Then the cells were intracellularly stained with 5 microg/ml of purified anti-human/mouse/r

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. Henkels KM, *et al.* 2009. *Biochem Biophys Res Commun.* 389:224. PubMed
13. Brobeli A, *et al.* 2010. *Blood Cells Mol Dis.* 45:159. PubMed
14. Wallace HA, *et al.* 2014. *Development.* 141:1332. PubMed
15. Mizokami A, *et al.* 2014. *Bone.* 69:68. 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.