Technical Data Sheet

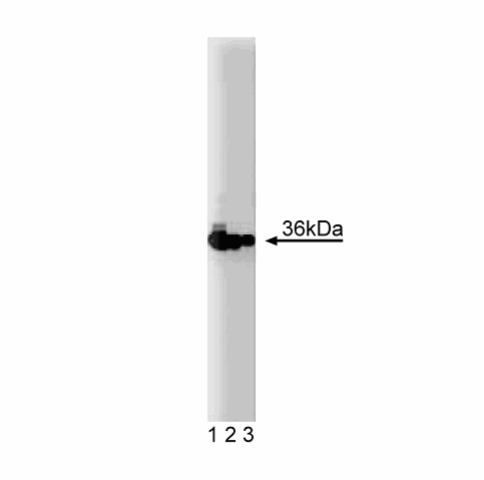
Purified Mouse Anti-PCNA

Product Information

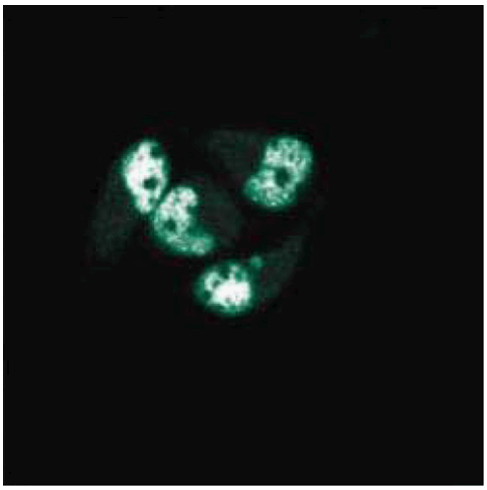
Material Number:	**610665**
Alternate Name:	Proliferating Cell Nuclear Antigen
Size:	150 µg
Concentration:	250 µg/ml
Clone:	24/PCNA
Immunogen:	Human PCNA aa. 68-230
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat, Dog
Target MW:	36 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Progression of the mammalian cell cycle is regulated in two different ways: 1) phosphorylation and dephosphorylation of key proteins; 2) synthesis and degradation of regulatory factors. The Proliferating Cell Nuclear Antigen (PCNA) was initially identified as a nuclear antigen in proliferating cells and was subsequently described as a subunit for DNA polymerase δ. Human PCNA is 262 amino acids with an apparent molecular weight of 36 kDa. PCNA protein levels peak during the S-phase of the cell cycle, at which time it forms a complex with the p21 inhibitor. PCNA is almost undetectable in other phases of the cycle. Because of its unique expression, PCNA has been extensively used in studies associating the prognosis of tumor progression and neoplastic proliferation.



Western blot analysis of PCNA on a Jurkat cell lysate (Human T-cell leukemia; ATCC TIB-152). *Lane 1: 1:5000, lane 2: 1:10,000, lane 3: 1:20,000 dilution of the mouse anti-PCNA antibody.*



Immunofluorescence staining of AN3 CA cells (Human endometrial adenocarcinoma; ATCC HTB-111).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20°C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611451	Jurkat Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Li Y, Dowbenko D, Lasky LA. AKT/PKB phosphorylation of p21Cip/WAF1 enhances protein stability of p21Cip/WAF1 and promotes cell survival. *J Biol Chem.* 2002; 277(13):11352-11361.(Biology: Western blot)

Moore JK, Scheinman RI, Bellgrau D. The identification of a novel T cell activation state controlled by a diabetogenic gene. *J Immunol.* 2001; 166(1):241-248. (Biology: Western blot)

Reilly PT, Wysocka J, Herr W. Inactivation of the retinoblastoma protein family can bypass the HCF-1 defect in tsBN67 cell proliferation and cytokinesis. *Mol Cell Biol.* 2002; 22(19):6767-6778.(Biology: Western blot)

Saitoh H, Pizzi MD, Wang J. Perturbation of SUMOlation enzyme Ubc9 by distinct domain within nucleoporin RanBP2/Nup358. *J Biol Chem.* 2002; 277(7):4755-4763.(Biology: Immunofluorescence)

Travali S, Ku DH, Rizzo MG, Ottavio L, Baserga R, Calabretta B. Structure of the human gene for the proliferating cell nuclear antigen. *J Biol Chem.* 1989; 264(13):7466-7472.(Biology)