

Datasheet for 600-401-968**PCNA Antibody****Overview**

Description:	Anti-PCNA (RABBIT) Antibody - 600-401-968
Item No.:	600-401-968
Size:	100 µg
Applications:	ELISA, WB, IP
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	The proliferating cell nuclear antigen (PCNA) is an auxiliary protein of DNA polymerase delta and is involved in the control of eukaryotic DNA replication by increasing the processibility of DNA polymerase during elongation of the leading strand. PCNA is expressed in the nucleus of all proliferating cells and is pivotal for DNA synthesis and cell cycle progression. In response to DNA damage, PCNA is mono-ubiquitinated and is involved in mismatch-provoked excision. PCNA is a useful marker for DNA synthesis and is highly conserved among most species.
Synonyms:	rabbit anti-PCNA antibody, proliferating cell nuclear antigen, cyclin
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PCNA
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human PCNA protein.

Purity/Specificity: This affinity purified antibody is directed against human PCNA protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross reactivity with PCNA protein from human, monkey, dog, mouse, rat, bovine, chicken, fish and Xenopus based on 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.

Relevant Links:

- [UniProtKB - P12004](#)
- [NCBI - 33239451](#)
- [GenelD - 5111](#)

Application Details

Tested Applications: ELISA, WB

Suggested Applications: IP (Based on references)

Application Note: This affinity purified antibody has been tested for use in ELISA, immunoprecipitation, and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 29-36 kDa in size corresponding to PCNA protein by western blotting in the appropriate cell lysate or extract.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:2,000 - 1:8,000

WB: 1:500 - 1:2,000

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 0.97mg/mL by UV absorbance at 280 nm

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: 0.01% (w/v) Sodium Azide

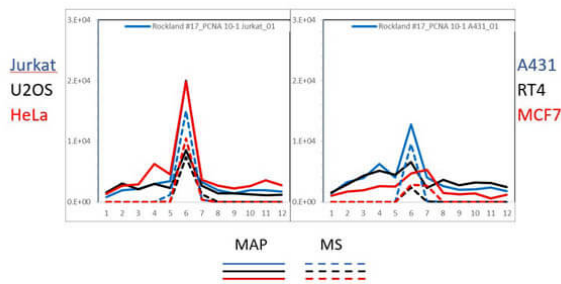
Stabilizer: None

Shipping & Handling

Shipping Condition: Dry Ice

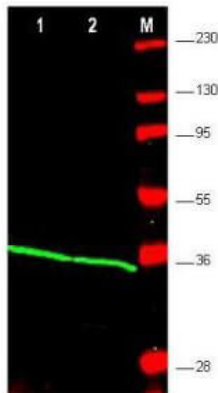
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



PAGE-MAP

PAGE-MAP (microsphere affinity proteomics) of Rabbit Anti-PCNA Antibody (Catalog Number: 600-401-968, Lot Number: 32579). Antibody array western blot binding of gelfree size separated fractions of multiple lysates (solid lines) and shotgun mass spectroscopy identification (dashed lines) of the target band run in parallel correlate confirming the specificity of this antibody against PCNA. Data was provided by the Lund-Johansen lab of Oslo University Hospital. For more information on PAGE-MAP/IP-MS identification of antibody specificity and its large-scale implementation for antibody validation see Sikorski et. al., (2018) Nature Methods 15, 909-912.



Western Blot

Western blot using Rockland's affinity purified anti-PCNA antibody shows detection of PCNA protein. Lane 1: HEK293 whole cell extracts (p/n W09-000-365). Lane 2: Jurkat whole cell extracts (p/n W09-001-370). Approximately 25µg of lysate was loaded per lane onto a 4-20% gradient gel followed by transfer to nitrocellulose. After blocking, the membrane was incubated with the primary antibody diluted to 1:1000. The membrane was washed and reacted with a 1:10,000 dilution of IRDye® 800 Conjugated Affinity Purified Goat-anti-Rabbit IgG [H&L] MX10 (p/n 611-132-122) (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers indicated at the right (lane M, 700 nm channel, red). Other detection systems will yield similar results.

References

- Sikorski et al. A high-throughput pipeline for validation of antibodies. *Nature Methods* (2018)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.