

Datasheet for 600-401-868**CDC27 Antibody****Overview**

Description:	Anti-CDC27 (RABBIT) Antibody - 600-401-868
Item No.:	600-401-868
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Cdc27 (also known as cell division cycle protein 27 homologue, CDC27Hs and H-NUC) shares strong similarity with <i>Saccharomyces cerevisiae</i> protein Cdc27, and the gene product of <i>Schizosaccharomyces pombe</i> nuc 2. Cdc27 is a component of anaphase-promoting complex (APC), which is composed of eight protein subunits and highly conserved in eukaryotic cells. APC catalyzes the formation of cyclin B-ubiquitin conjugate that is responsible for the ubiquitin-mediated proteolysis of B-type cyclins. This protein and 3 other members of the APC complex contain the TPR (tetratricopeptide repeat), a protein domain important for protein-protein interaction. This protein was shown to interact with mitotic checkpoint proteins including Mad2, p53CDC and BUBR1, and thus may be involved in controlling the timing of mitosis. Cdc27 has a nuclear localization.
Synonyms:	rabbit anti-CDC27 Antibody, CDC-27, CDC 27, Anaphase Promoting Complex Subunit 3 antibody, APC 3 antibody, CDC27Hs antibody, Cell Division Cycle 27 antibody, Cell division cycle protein 27 homolog antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CDC27
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 amino acids 415-445 of Human cdc27.
Purity/Specificity:	This affinity purified antibody is directed against human Cdc27 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, chimpanzee, chicken, rat and dog based on 100% homology for the immunogen sequence. Expect cross reactivity with cdc27 from mouse as only a single amino acid residue change is found for the immunogen sequence. Cross reactivity with cdc27 homologues from other sources has not been determined.
Relevant Links:	• UniProtKB - P30260 • NCBI - 167466175 • GenelD - 996

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 92 kDa in size corresponding to Cdc27 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:	1:5,000 - 1:40,000
IF:	User Optimized
WB:	1:500 - 1:2,000

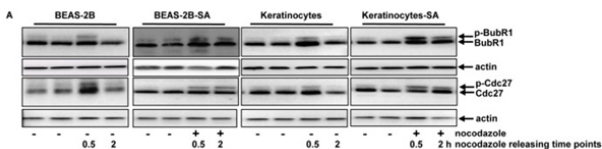
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/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

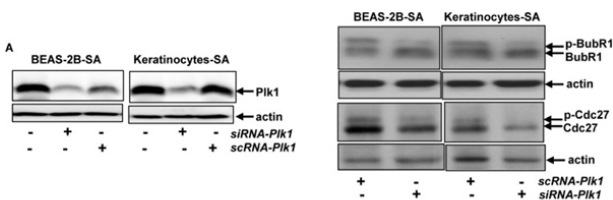
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several 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



Western Blot

A. The phosphorylated BubR1 and Cdc27 in the cells, after releasing from nocodazole block, were analyzed by immunoblotting analysis. Fig 4. PMID: 30899418



Western Blot

A. After being treated with sc or siRNA-Plk1, the suppression of Plk1 expression in the cells was tested by immunoblotting (left panels). After the treatment of scRNA- or siRNA-Plk1, the expressions of the phosphorylated BubR1 and Cdc27 were examined in the cells that were released 1 h from nocodazole block (right panels). Fig 5. PMID: 30899418



Western Blot

Western blot using Rockland's Affinity Purified anti-cdc27 antibody shows detection of a band ~90 kDa corresponding to human cdc27 (arrowhead). Approximately 35µg of HeLa whole cell lysate (p/n W09-000-364) was separated by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1.0ug/ml for 2 h at room temperature followed by washes and reaction with a 1:10,000 dilution of IRDye800 conjugated Gt-a-Rabbit IgG [H&L] MX (p/n 611-132-122) for 45 min at room temperature. IRDye800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

References

- Ganapathy, S et al. Chronic low dose arsenic exposure preferentially perturbs mitotic phase of the cell cycle. *Genes & Cancer* (2019)

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.