

Datasheet for 600-401-885**CDC27 phospho T244 Antibody****Overview**

Description:	Anti-CDC27 pT244 (RABBIT) Antibody - 600-401-885
Item No.:	600-401-885
Size:	100 µg
Applications:	Dot Blot, ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Human CDC27 (also called Cell division cycle protein 27 homolog, CDC27Hs and H-NUC) shares strong similarity with <i>Saccharomyces cerevisiae</i> protein Cdc27. This protein 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 a 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.
Synonyms:	rabbit anti-CDC27 pT244 Antibody, CDC 27, CDC-27, Cell division cycle protein 27 homolog, H-NUC, APC3, Anaphase-promoting complex subunit 3, ANAPC3
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CDC27, D0S1430E
Reactivity:	Human
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phospho-peptide corresponding to an internal portion surrounding T244 of Human CDC27.
Purity/Specificity:	This affinity purified antibody is directed against the phosphorylated form of human CDC27 at the pT244 residue. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross adsorbed against the non-phosphorylated form of the immunizing peptide. Reactivity occurs against human CDC27 pT244 protein and the antibody is specific for the phosphorylated form of the protein. Reactivity with non-phosphorylated human CDC27 is minimal by ELISA. The antibody does not cross-react with CDC27 phosphorylated at other sites. A BLAST analysis was used to suggest reactivity with this protein from human, rat, dog, bovine and chimpanzee based on 100% homology for the immunogen sequence. Cross reactivity with CDC27 protein from mouse, rat and chicken may occur as sequence homology varies by one amino acid residue in this sequence (90% homology). Cross reactivity with CDC27 homologues from other sources has not been determined.
Relevant Links:	• UniProtKB - P30260 • NCBI - 167466175 • GenelD - 996

Application Details

Tested Applications:	Dot Blot, 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. Less than 1% reactivity is observed against the non-phosphorylated form of the immunizing peptide. This antibody is phospho specific for pT244 of CDC27.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:8,000 - 1:30,000
IP:	1:100
WB:	1:300 - 1:2,000

Formulation

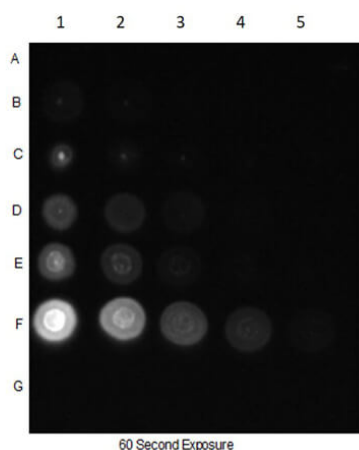
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm

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

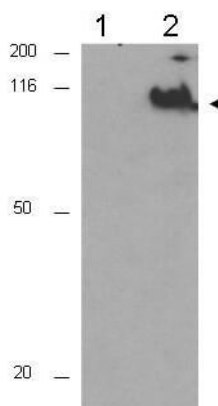
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several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



Dot Blot

Dot Blot of Rabbit Anti-CDC27pT244 Antibody. Dilutions in Columns: (1) 100ng, (2) 33.33ng, (3) 11.11ng, (4) 3.7ng, (5) 1.23ng. Tested BSA Peptide Reactivity in Rows: (A) AKT1-BSA, (B) AKT1 pT308-BSA, (C) AKT1 S473-BSA, (D) AKT1 pS473-BSA, (E) CDC27 T244-BSA, (F) CDC27 pT244-BSA, (G) BSA control. Primary Antibody: Anti-CDC27pT244 at 1µg/mL overnight at 2-8°C. Secondary Antibody: Goat anti-Rabbit IgG HRP (p/n 611-103-122) at 1:70,000 at RT for 30mins. Block: BlockOut Buffer (p/n MB-073).



Western Blot

Western blot using Rockland's Affinity Purified anti-CDC27 pT244 antibody shows detection of a band ~92 kDa corresponding to phosphorylated human CDC27 (arrowhead). Lane 1 shows lysate from asynchronous cells. Lane 2 shows lysate from cells treated with nocodazole. Phosphorylated CDC27 is mostly present only in cell preparations arrested in mitosis. Each lane contains approximately 30 µg of HeLa whole cell lysates separated by 12.5% SDS-PAGE followed by transfer to nitrocellulose. After blocking with 5% non-fat dry milk in TTBS, the membrane was probed with the primary antibody diluted to 1:500 for 1 h at room temperature followed by washes and reaction with a 1:5,000 dilution of HRP Gt-a-Rabbit IgG [H&L] MX (611-103-122) for 45 min at room temperature. ECL reagent was used for detection. Other detection systems will yield similar results. Data contributed by Bing Li, UT Southwestern.

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.