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Anti-CDC27 pT244 (RABBIT) Antibody

CDC27 phospho T244 Antibody
Catalog # ASR5320

Specification

Anti-CDC27 pT244 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, IP, I, LCI**
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.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal portion surrounding T244 of Human CDC27.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-CDC27 pT244 (RABBIT) Antibody - Additional Information

Gene ID 996

Other Names
996

Purity
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.

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.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-CDC27 pT244 (RABBIT) Antibody - Protein Information

Name CDC27

Synonyms ANAPC3, D0S1430E, D17S978E

Function
Component of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase that controls progression through mitosis and the G1 phase of the cell cycle (PubMed:18485873). The APC/C complex acts by mediating ubiquitination and subsequent degradation of target proteins: it mainly mediates the formation of 'Lys-11'-linked polyubiquitin chains and, to a lower extent, the formation of 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains (PubMed:18485873). The APC/C complex catalyzes assembly of branched 'Lys-11'-/'Lys-48'-linked branched ubiquitin chains on target proteins (PubMed:29033132).

Cellular Location
Nucleus. Cytoplasm, cytoskeleton, spindle

Anti-CDC27 pT244 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CDC27 pT244 (RABBIT) Antibody - Images

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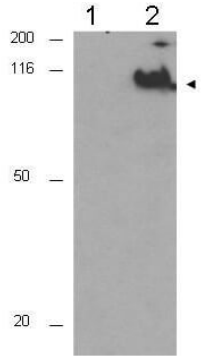

Western blot using Rockland's Affinity Purified anti-CDC27 pT244 antibody shows detection of a band ~92 kDa corresponding to phosphorylated human CDC27 (arrowhead). Lane 1 shows lysate from asynchronous cells. Lane 2 shows lysate from cells treated with nocodazole. Phosphorylated CDC27 is mostly present 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.

Anti-CDC27 pT244 (RABBIT) Antibody - Background

Human CDC27 (also called Cell division cycle protein 27 homolog, CDC27Hs and H-NUC) shares strong similarity with Saccharomyces cerevisiae 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, p55CDC and BUBR1, and thus may be involved in controlling the timing of mitosis.