

CDC27 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1417a

Specification

CDC27 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description** WB, IHC, E <u>P30260</u> Human Mouse Monoclonal IgG1 91kDa KDa

Cdc27 shares strong similarity with Saccharomyces cerevisiae protein Cdc27, and the gene product of Schizosaccharomyces pombe nuc 2. It is a component of the Anaphase Promoting Complex (APC), which is composed of eight protein subunits and is highly conserved in eucaryotic cells. The APC catalyzes the formation of the 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.

Immunogen Purified recombinant fragment of human CDC27 expressed in E. Coli.

Formulation Ascitic fluid containing 0.03% sodium azide.

CDC27 Antibody - Additional Information

Gene ID 996

Other Names Cell division cycle protein 27 homolog, Anaphase-promoting complex subunit 3, APC3, CDC27 homolog, CDC27Hs, H-NUC, CDC27, ANAPC3, D0S1430E, D17S978E

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CDC27 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



CDC27 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'-linked polyubiquitin chains on target proteins (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

CDC27 Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CDC27 Antibody - Images





Figure 1: Western blot analysis using CDC27 mouse mAb against CDC27(AA: 724-830)-hlgGFc transfected HEK293 cell.



Figure 2: Immunohistochemical analysis of paraffin-embedded lung cancer tissues (left) and colon cancer tissues (right) using CDC27 mouse mAb with DAB staining.

CDC27 Antibody - References

1. Mol Cell Biol. 2004 May;24(9):3577-87. 2. J Biol Chem. 2004 Oct 1;279(40):42128-38.