

AP09280PU-N

Polyclonal Antibody to CDC27 (422-430) - Aff - Purified

Alternate names:	CDC27Hs, Cell division cycle protein 27 homolog, D0S1430E, D17S978E, H-NUC
Quantity:	0.1 mg
Concentration:	1.95 mg/ml (by UV absorbance at 280 nm)
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, p53CDC and BUBR1, and thus may be involved in controlling the timing of mitosis.
Uniprot ID:	P30260
NCBI:	NP_001107563.1
GeneID:	996
Host / Isotype:	Rabbit / IgG
Immunogen:	Synthetic peptide corresponding amino acids 422-430 of Human cdc27
Format:	State: Liquid purified Ig Purification: Affinity chromatography Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide
Applications:	ELISA: 1/5,000 - 1/40,000. Western Blot: 1/500 - 1/2,000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody is directed against CDC27 protein.
Species Reactivity:	Tested: Human. Expected from sequence similarity: Rat, Canine, Chicken, Chimpanzee, Mouse.
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Gabellini D, Colaluca IN, Vodermaier HC, Biamonti G, Giacca M, Falaschi A, et al. Early mitotic degradation of the homeoprotein HOXC10 is potentially linked to cell cycle progression. EMBO J. 2003 Jul 15;22(14):3715-24. PubMed PMID: 12853486. 2. Topper LM, Campbell MS, Tugendreich S, Daum JR, Burke DJ, Hieter P, et al. The dephosphorylated form of the anaphase-promoting complex protein Cdc27/Apc3 concentrates on kinetochores and chromosome arms in mitosis. Cell Cycle. 2002 Jul-Aug;1(4):282-92. PubMed PMID: 12429948.

3. Wassmann K, Benezra R. Mad2 transiently associates with an APC/p53Cdc complex during mitosis. *Proc Natl Acad Sci U S A*. 1998 Sep 15;95(19):11193-8. PubMed PMID: 9736712.
4. Yu H, Peters JM, King RW, Page AM, Hieter P, Kirschner MW. Identification of a cullin homology region in a subunit of the anaphase-promoting complex. *Science*. 1998 Feb 20;279(5354):1219-22. PubMed PMID: 9469815.
5. Ho PP, Couch FJ, Brody LC, Abel KJ, Boehnke M, Shearon TH, et al. Localization of the human homolog of the yeast cell division control 27 gene (CDC27) proximal to ITGB3 on human chromosome 17q21.3. *Somat Cell Mol Genet*. 1995 Sep;21(5):351-5. PubMed PMID: 8619132.
6. Tugendreich S, Tomkiel J, Earnshaw W, Hieter P. CDC27Hs colocalizes with CDC16Hs to the centrosome and mitotic spindle and is essential for the metaphase to anaphase transition. *Cell*. 1995 Apr 21;81(2):261-8. PubMed PMID: 7736578.
7. Chen PL, Ueng YC, Durfee T, Chen KC, Yang-Feng T, Lee WH. Identification of a human homologue of yeast nuc2 which interacts with the retinoblastoma protein in a specific manner. *Cell Growth Differ*. 1995 Feb;6(2):199-210. PubMed PMID: 7756179.
8. Tugendreich S, Boguski MS, Seldin MS, Hieter P. Linking yeast genetics to mammalian genomes: identification and mapping of the human homolog of CDC27 via the expressed sequence tag (EST) data base. *Proc Natl Acad Sci U S A*. 1993 Nov 1;90(21):10031-5. PubMed PMID: 8234252.