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APC3 Antibody

Catalog # ASC11115

Product Information

Application	WB, E, IHC-P
Primary Accession	P30260
Other Accession	NP_001247, 167466175
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	91867
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	APC3 antibody can be used for detection of APC3 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL.

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
Target/Specificity	CDC27;
Reconstitution & Storage	APC3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	APC3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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 the cell cycle (PubMed:18485873, PubMed:27120157, PubMed:27509861). APC/C 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). APC/C catalyzes assembly of branched 'Lys-11'-/'Lys- 48'-linked branched ubiquitin chains on target proteins (PubMed:29033132). APC/C is activated by CDC20 in the metaphase/anaphase transition of cell cycle, targeting the degradation of cyclin B and securin (PubMed:27120157, PubMed:27509861). APC/C is regulated by the mitotic checkpoint complex (MCC), which inhibits APC/C and delays chromosome segregation (PubMed:27509861).

Cellular Location Nucleus. Cytoplasm, cytoskeleton, spindle

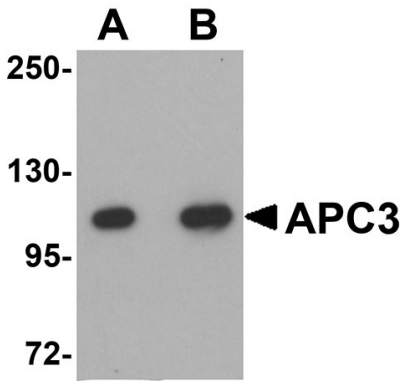
Background

APC3 Antibody: Cell cycle regulated protein ubiquitination and degradation within subcellular domains is thought to be essential for the normal progression of mitosis. APC3, also known as CDC27, a highly conserved component of the anaphase promoting complex/cyclosome (APC/C), is a cell cycle-regulated E3 ubiquitin ligase that controls progression through mitosis and the G1 phase of the cell cycle. APC/C is responsible for degrading anaphase inhibitors, mitotic cyclins, and spindle-associated proteins ensuring that events of mitosis take place in proper sequence. APC3 contains a tetratricopeptide repeat (TPR) region and interacts with mitotic checkpoint proteins including Mad2, p55CDC and BUBR1.

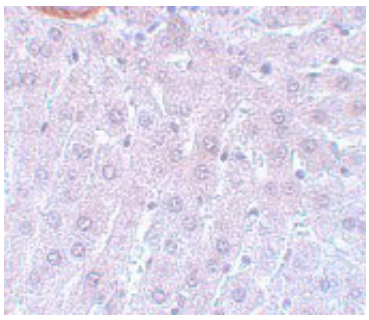
References

JM Peters. The anaphase promoting complex/cyclosome: a machine designed to destroy. Nat. Rev. Mol. Cell Biol.2006; 7:644-56.
Jorgensen PM, Graslund S, Betz R, et al. Characterisation of the human APC1, the largest subunit of the anaphase-promoting complex. Gene2001; 262:51-9.

Images



Western blot analysis of APC3 in mouse liver tissue lysate with APC3 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of APC3 in rat liver tissue with APC3 antibody at 5 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.