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APC6 Antibody

Catalog # ASC11118

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q13042
Other Accession	NP_003894, 118402580
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	71656
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	APC6 antibody can be used for detection of APC6 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	8881
Other Names	Cell division cycle protein 16 homolog, Anaphase-promoting complex subunit 6, APC6, CDC16 homolog, CDC16Hs, Cyclosome subunit 6, CDC16, ANAPC6
Target/Specificity	CDC16;
Reconstitution & Storage	APC6 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	APC6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDC16
Synonyms	ANAPC6
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). 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 complex 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	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Note=Colocalizes with CDC27 to the centrosome at all stages of the cell cycle and to the mitotic spindle.

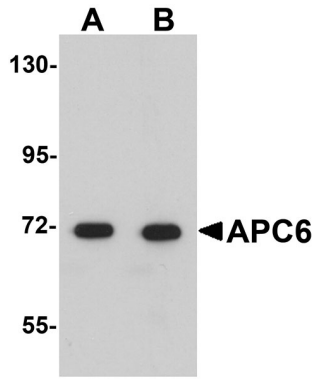
Background

APC6 Antibody: Cell cycle regulated protein ubiquitination and degradation within subcellular domains is thought to be essential for the normal progression of mitosis. APC6 is a highly conserved 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. APC/C is responsible for degrading anaphase inhibitors, mitotic cyclins, and spindle-associated proteins ensuring that events of mitosis take place in proper sequence. The individual APC/C components mRNA and protein levels are expressed at approximately the same levels in most tissues and cell lines, suggesting that they perform their functions as part of a complex. While little is known of APC6, it has been shown to interact with and is stabilized by CDC26 through an intermolecular TPR mimic composed of one helix from each protein.

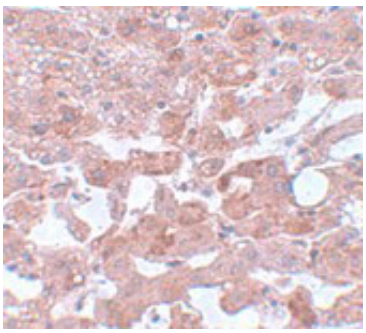
References

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.
Wang J, Dye BT, Rajashankar KR, et al. Insights into anaphase promoting complex TPR subdomain assembly from a CDC26-APC structure. Nat. Struct. Mol. Biol.2009; 16:987-9.

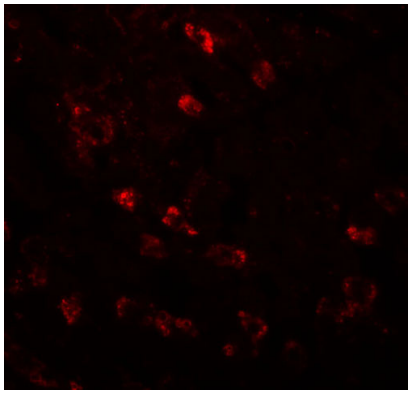
Images



Western blot analysis of APC6 in human liver tissue lysate with APC6 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of APC6 in human liver tissue with APC6 antibody at 5 µg/mL.



Immunofluorescence of APC6 in human liver tissue with APC6 antibody at 20 µg/mL.

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