

# **APC6** Antibody

Catalog # ASC11118

## **Product Information**

**Application** WB, IF, E, IHC-P

Primary Accession Q13042

Other Accession <u>NP\_003894</u>, <u>118402580</u>

**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°C for three months and -20°C, 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 mitosis and the G1 phase of the cell cycle (PubMed:<u>18485873</u>). 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:<u>18485873</u>). The APC/C complex catalyzes

assembly of branched 'Lys-11'-/'Lys-48'-linked branched ubiquitin chains on target proteins (PubMed:29033132).

#### **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.

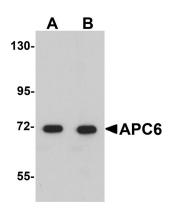
## References

JM Peters. The anaphase promoting complex/cyclosome: a machine designed to destroy. Nat. Rev. Mol. Cell Biol.2006; 7:644-56.

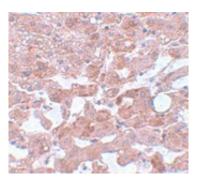
Jorgensen PM, Graslund S, Betz R, et al. Characterisation of the human APC1, the largest subunit of the anaphase-promoting complex. Gene2001; 262:51-9.

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**



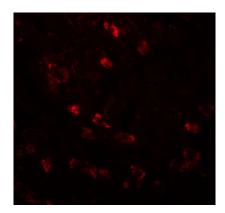
Western blot analysis of APC6 in human liver tissue lysate with APC6 antibody at (A) 1 and (B) 2 µg/mL.



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  $\mu$ g/mL.



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