

# **APC5** Antibody

Catalog # ASC11117

### **Product Information**

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

Primary Accession Q9UJX4

Other AccessionQ9UJX4, 37537861ReactivityHuman, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 85077
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

**Application Notes** APC5 antibody can be used for detection of APC5 by Western blot at 1 - 2

Lg/mL. Antibody can also be used for immunohistochemistry starting at 5

□g/mL. For immunofluorescence start at 20 □g/mL.

## **Additional Information**

**Gene ID** 51433

Other Names Anaphase-promoting complex subunit 5, APC5, Cyclosome subunit 5,

ANAPC5, APC5

Target/Specificity ANAPC5;

**Reconstitution & Storage** APC5 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** APC5 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **Protein Information**

Name ANAPC5

Synonyms APC5

**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** 

Nucleus. Cytoplasm, cytoskeleton, spindle

# **Background**

APC5 Antibody: Cell cycle regulated protein ubiquitination and degradation within subcellular domains is thought to be essential for the normal progression of mitosis. APC5 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 APC5, it is thought that APC5 associates with other APC/C components APC1, APC4, and CDC23 interdependently, such that loss of any one subunit reduces binding between the remaining three.

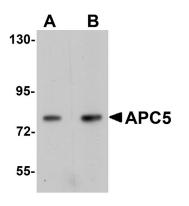
#### References

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

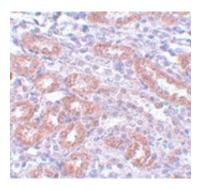
Jorgensen PM, Graslund S, Betz R, et al. Characterisation of the human APC1, the largest subunit of the anaphase-promoting complex. Gene2001; 262:51-9.

Thronton BR, Ng TM, Matyskiela ME, et al. An architectural map of the anaphase-promoting complex. Genes Dev.2006; 20:449-60.

# **Images**

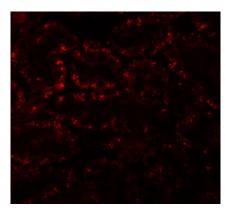


Western blot analysis of APC5 in human kidney tissue lysate with APC5 antibody at (A) 1 and (B) 2  $\mu$ g/mL.



Immunohistochemistry of APC5 in rat kidney tissue with APC5 antibody at 5 µg/mL.

Immunofluorescence of APC5 in rat kidney tissue with APC5 antibody at 20 µg/mL.



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