

## **APC5 Antibody**

Catalog # ASC11117

#### **Specification**

## **APC5 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IHC-P, IF, E
Q9UJX4
Q9UJX4, 37537861
Human, Mouse, Rat
Rabbit
Polyclonal
IgG
APC5 antibody can be used for detection of
APC5 by Western blot at 1 - 2 μg/mL.
Antibody can also be used for
immunohistochemistry starting at 5 μg/mL.

For immunofluorescence start at 20 µg/mL.

### **APC5 Antibody - Additional Information**

Gene ID Target/Specificity ANAPC5; 51433

## **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.

#### **APC5 Antibody - 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:<a href="http://www.uniprot.org/citations/18485873" target="\_blank">18485873</a>). 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:<a href="http://www.uniprot.org/citations/18485873" target="\_blank">18485873</a>). The APC/C complex catalyzes assembly of branched 'Lys-11'-/'Lys-48'-linked branched ubiquitin chains on target proteins (PubMed:<a href="http://www.uniprot.org/citations/29033132"



target="\_blank">29033132</a>).

**Cellular Location** 

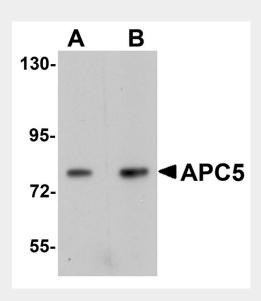
Nucleus. Cytoplasm, cytoskeleton, spindle

## **APC5 Antibody - Protocols**

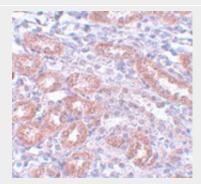
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **APC5 Antibody - Images**

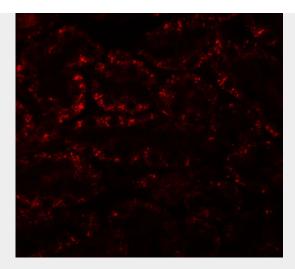


Western blot analysis of APC5 in human kidney tissue lysate with APC5 antibody at (A) 1 and (B)  $2 \mu g/mL$ .



Immunohistochemistry of APC5 in rat kidney tissue with APC5 antibody at 5  $\mu$ g/mL.





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

# **APC5 Antibody - 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.

### **APC5 Antibody - 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.