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APC4 Antibody
Catalog # ASC11116

Specification

APC4 Antibody - Product Information

Application	**WB, IHC-P, E**
Primary Accession	Q9UJX5
Other Accession	Q9UJX5, 205371737
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**APC4 antibody can be used for detection of APC4 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL.**

APC4 Antibody - Additional Information

Gene ID	**29945**

Target/Specificity
ANAPC4;

Reconstitution & Storage
APC4 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
APC4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

APC4 Antibody - Protein Information

Name ANAPC4

Synonyms APC4

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:18485873). 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:18485873). 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).

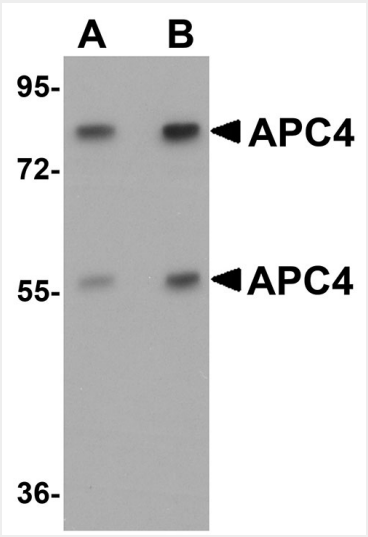
Cellular Location
Nucleus.

APC4 Antibody - Protocols

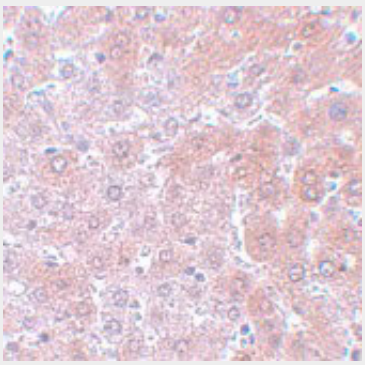
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

APC4 Antibody - Images



Western blot analysis of APC4 in mouse liver tissue lysate with APC4 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of APC4 in rat liver tissue with APC4 antibody at 5 µg/mL.

APC4 Antibody - Background

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

APC4 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.