

# APC13 Antibody

Catalog # ASC11123

## Product Information

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<b>Application</b>	WB, IF, E
<b>Primary Accession</b>	<a href="#">Q9BS18</a>
<b>Other Accession</b>	<a href="#">NP_056206</a> , <a href="#">32698710</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	8521
<b>Concentration (mg/ml)</b>	1 mg/mL
<b>Conjugate</b>	Unconjugated
<b>Application Notes</b>	APC13 antibody can be used for detection of APC13 by Western blot at 1 $\mu$ g/mL. For immunofluorescence start at 20 $\mu$ g/mL.

## Additional Information

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<b>Gene ID</b>	25847
<b>Other Names</b>	Anaphase-promoting complex subunit 13, APC13, Cyclosome subunit 13, ANAPC13
<b>Target/Specificity</b>	ANAPC13;
<b>Reconstitution &amp; Storage</b>	APC13 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.
<b>Precautions</b>	APC13 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ANAPC13
<b>Function</b>	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="#">15060174</a> , PubMed: <a href="#">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="#">15060174</a> , PubMed: <a href="#">18485873</a> ). The APC/C complex catalyzes assembly of branched 'Lys-11'-/'Lys-48'-linked branched ubiquitin chains on target proteins (PubMed: <a href="#">29033132</a> ).

## Background

APC13 Antibody: Cell cycle regulated protein ubiquitination and degradation within subcellular domains is thought to be essential for the normal progression of mitosis. APC13 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. APC13 promotes the stable association of APC3/Cdc27 and APC6/Cdc16 with the APC/C.

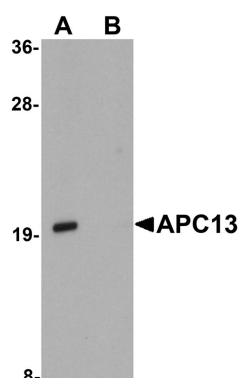
## References

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

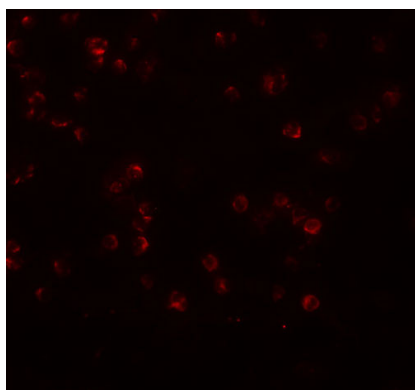
Jorgensen PM, Graslund S, Betz R, et al. Characterisation of the human APC1, the largest subunit of the anaphase-promoting complex. *Gene*2001; 262:51-9.

Schwickart M, Havlis J, Habermann B, et al. Swm1/Apc13 is an evolutionarily conserved subunit of the anaphase-promoting complex stabilizing the association of Cdc16 and Cdc27. *Mol. Cell. Biol.*2004; 24:3562-76.

## Images



Western blot analysis of APC13 in Jurkat cell tissue lysate with APC13 antibody at 1  $\mu$ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunofluorescence of APC13 in Jurkat cells with APC13 antibody at 20  $\mu$ g/mL.