10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

APC8 Antibody

Catalog # ASC11120

Product Information

Application	WB, ICC, E
Primary Accession	Q9UJX2
Other Accession	Q9UJX2, 254763423
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	68834
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	APC8 antibody can be used for detection of APC8 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunocytochemistry starting at 5 g/mL.

Additional Information

Gene ID	8697
Other Names	Cell division cycle protein 23 homolog, Anaphase-promoting complex subunit 8, APC8, Cyclosome subunit 8, CDC23, ANAPC8
Target/Specificity	CDC23;
Reconstitution & Storage	APC8 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	APC8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDC23
Synonyms	ANAPC8
Function	Component of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase that controls progression through the cell cycle (PubMed:18485873, PubMed:27120157, PubMed:27509861). APC/C 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). APC/C catalyzes assembly of branched

'Lys-11'-/'Lys- 48'-linked branched ubiquitin chains on target proteins (PubMed:29033132). APC/C is activated by CDC20 in the metaphase/anaphase transition of cell cycle, targeting the degradation of cyclin B and securin (PubMed:27120157, PubMed:27509861). APC/C is regulated by the mitotic checkpoint complex (MCC), which inhibits APC/C and delays chromosome segregation (PubMed:27509861).

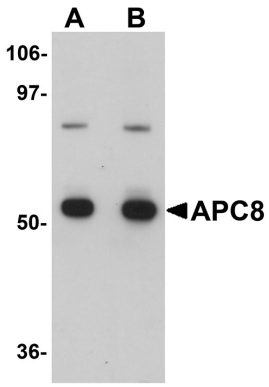
Background

APC8 Antibody: Cell cycle regulated protein ubiquitination and degradation within subcellular domains is thought to be essential for the normal progression of mitosis. APC8 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. In Drosophila, silencing of APC8 results in developmental delay and pupal lethality with elevated levels of apoptosis, high mitotic index, and delayed or blocked mitosis.

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.
Pal M, Nagy O, Menesi D, et al. Structurally related TPR subunits contribute differently to the function of the anaphase-promoting complex in Drosophila melanogaster. J. Cell Sci.2007; 120:3238-48.

Images



Western blot analysis of APC8 in K562 cell lysate with APC8 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of APC8 in K562 cells with APC8 antibody at 5 µg/mL.

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