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APC1 Antibody

Catalog # ASC11113

Product Information

Application	WB, E, IHC-P
Primary Accession	Q9H1A4
Other Accession	Q9H1A4, 37537845
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	216500
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	APC1 antibody can be used for detection of APC1 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL.

Additional Information

Gene ID	64682
Other Names	Anaphase-promoting complex subunit 1, APC1, Cyclosome subunit 1, Mitotic checkpoint regulator, Testis-specific gene 24 protein, ANAPC1, TSG24
Target/Specificity	ANAPC1;
Reconstitution & Storage	APC1 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	APC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ANAPC1
Synonyms	TSG24
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 the 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).

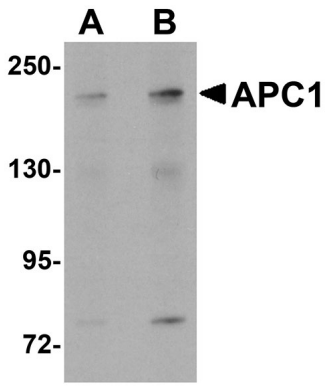
Background

APC1 Antibody: Cell cycle regulated protein ubiquitination and degradation within subcellular domains is thought to be essential for the normal progression of mitosis. APC1, also known as mitotic checkpoint regulator (MCPR), 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.

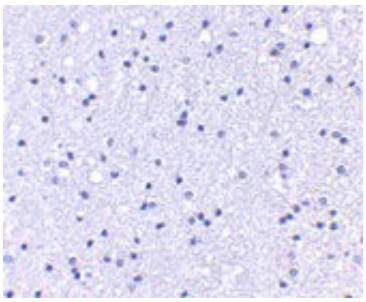
References

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.

Images



Western blot analysis of APC1 in SK-N-SH cell lysate with APC1 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of APC1 in human brain tissue with APC1 antibody at 5 µg/mL.

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