

APC2 Antibody

Catalog # ASC11114

Product Information

Application WB, IF, ICC, E **Primary Accession** 095996

Other Accession BAA34611, 3894265
Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 243949
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

Application Notes APC2 antibody can be used for detection of APC2 by Western blot at 1 - 2

□g/mL. Antibody can also be used for immunocytochemistry starting at 5

□g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID 10297

Other Names Adenomatous polyposis coli protein 2, Adenomatous polyposis coli

protein-like, APC-like, APC2, APCL

Target/Specificity APC2;

Reconstitution & Storage APC2 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 APC2 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name APC2 (<u>HGNC:24036</u>)

Synonyms APCL

Function Stabilizes microtubules and may regulate actin fiber dynamics through the

activation of Rho family GTPases (PubMed: 25753423). May also function in

Wnt signaling by promoting the rapid degradation of CTNNB1 (PubMed:10021369, PubMed:11691822, PubMed:9823329).

Cellular Location Cytoplasm, cytoskeleton. Golgi apparatus. Cytoplasm Cytoplasm, perinuclear

region Note=Associated with actin filaments (PubMed:11691822,

PubMed:25753423). Associated with microtubule network (PubMed:10644998, PubMed:11691822, PubMed:25753423).

Tissue Location

Widely expressed (at protein level). Specifically expressed in the CNS.

Background

APC2 Antibody: Cell cycle regulated protein ubiquitination and degradation within subcellular domains is thought to be essential for the normal progression of mitosis. APC2 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. Like APC11, APC2 contains cullin and RING finger domains that are thought to be important in regulating ubiquitination activity.

References

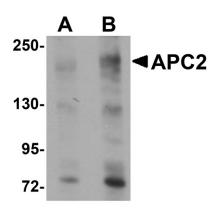
JM Peters. The anaphase promoting complex/cyclosome: a machine designed to destroy. Nat. Rev. Mol. Cell Biol.2006; 7:644-56.

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.

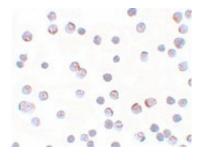
Yu H, Peters JM, King RW, et al. Identification of a cullin homology region in a subunit of the anaphase-promoting complex. Science1998; 279:1219-22.

Zacharie W, Shevchenko A, Andrews PD, et al. Mass spectrometric analysis of the anaphase-promoting complex from yeast: identification of a subunit related to cullins. Science1998; 1216-19.

Images

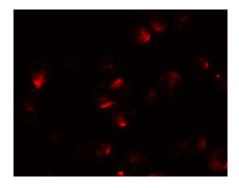


Western blot analysis of APC2 in HeLa cell lysate with APC2 antibody at (A) 1 and (B) 2 μ g/mL.



Immunocytochemistry of APC2 in HeLa cells with APC2 antibody at 5 μg/mL.

Immunofluorescence of APC2 in HeLa cells with APC2 antibody at 20 µg/mL.



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