

APC2 Antibody

Catalog # ASC11114

Specification

APC2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, ICC, IF <u>O95996</u> <u>BAA34611</u>, <u>3894265</u> Human, Mouse Rabbit Polyclonal IgG APC2 antibody can be used for detection of APC2 by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunocytochemistry starting at 5 μg/mL. For immunofluorescence start at 20 μg/mL.

APC2 Antibody - Additional Information

Gene ID Target/Specificity APC2;

10297

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.

APC2 Antibody - Protein Information

Name APC2 (HGNC:24036)

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: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

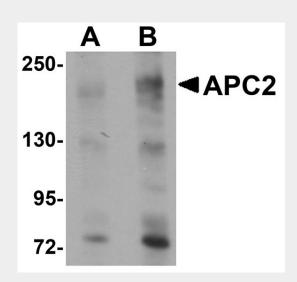
Widely expressed (at protein level). Specifically expressed in the CNS.

APC2 Antibody - Protocols

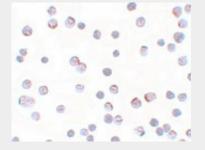
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

APC2 Antibody - Images

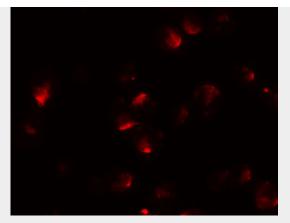


Western blot analysis of APC2 in HeLa cell lysate with APC2 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of APC2 in HeLa cells with APC2 antibody at 5 $\mu\text{g/mL}.$





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

APC2 Antibody - 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.

APC2 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.

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.