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APC2 Rabbit pAb

Catalog # AP99334

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9UJX6
Other Accession	Q9UJX6
Predicted	Rat, Pig, Human, Mouse, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	93828
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human APCL/APC2
Epitope Specificity	1-100/2303
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the adenomatous polyposis coli (APC) family. Contains 6 ARM repeats.
SUBUNIT	Interacts with PSRC1 (By similarity). Interacts with APC, CTNNB1, MAPRE1, MAPRE3, TP53BP2 and possibly with AXIN2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The adenomatous polyposis syndromes, familial adenomatous polyposis (FAP) and Gardner's syndrome (GS), are characterized by numerous adenomatous polyps throughout the entire colon. These polyps invariably progress to colon cancer in addition to other extracolonic manifestations. The cloning of the APC gene revealed a ubiquitously expressed protein, 2843 amino acids in length, which is frequently mutated in patients suffering from FAP and GS. APC has been found to be associated with structural components of intracellular junctions. b-catenin and g-catenin (also called plakoglobin) are involved in the regulation of cellular adhesion. APC and E cadherin compete for binding to specific internal regions of both b- and g-catenin. Interactions between cytoskeleton and the APC, E cadherin, b/g catenin complex are mediated by a-catenin.

Additional Information

Gene ID	29882
Other Names	APC2; 9230107K09Rik; Emi4; Imi4; mKIAA1406; ANC2_HUMAN; ANAPC2; Cyclosome subunit 2; KIAA1406; ANC2_MOUSE; anaphase promoting complex subunit 2
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ANAPC2
Synonyms	APC2, KIAA1406
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:11739784, PubMed:18485873, PubMed:27120157, PubMed:27509861). Together with the RING-H2 protein ANAPC11, forms the catalytic component of the E3 ubiquitin ligase complex (PubMed:11739784, 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:11739784, 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). The CDC20-APC/C complex positively regulates the formation of synaptic vesicle clustering at active zone to the presynaptic membrane in postmitotic neurons (By similarity). CDC20-APC/C-induced degradation of NEUROD2 drives presynaptic differentiation (By similarity).

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