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APC11 Rabbit pAb

Catalog # AP97754

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9NYG5
Other Accession	Q9NYG5
Predicted	Rat, Pig, Human, Mouse, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	9841
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human APC11
Epitope Specificity	1-84/84
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 RING-box family. Contains 1 RING-type zinc finger.
SUBUNIT	The APC/C is composed of at least 12 subunits. Interacts with the cullin domain of ANAPC2. Interacts with UBE2D2.
Post-translational modifications	Auto-ubiquitinated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Comprising more than ten subunits, the anaphase-promoting complex (APC) acts in a cell-cycle dependent manner to promote the separation of sister chromatids during the transition between metaphase and anaphase in mitosis. APC, or cyclosome, accomplishes this progression through the ubiquitination of mitotic cyclins and other regulatory proteins that are targeted for destruction during cell division. APC is phosphorylated, and thus activated, by protein kinases Cdk1/cyclin B and polo-like kinase (Plk). APC is under tight control by a number of regulatory factors, including CDC20, CDH1 and MAD2. Specifically, CDC20 and CDH1 directly bind to APC and activates APC's cyclin-ubiquitination activity. In contrast, MAD2 inhibits APC by forming a ternary complex with CDC20 and APC; thus preventing APC activation. APC11 is a RING-H2 finger protein that allows for the synthesis of multiubiquitin chains in the presence of Ubiquitin carrier protein 4 (Ubc4) and ubiquitin conjugating enzyme (E2). In addition, a heterodimeric complex of either Ubc4 or UbcH10 with APC11 and APC2 catalyzes the ubiquitination of human securin and cyclin B1.

Additional Information

Gene ID	51529
Other Names	APC11; Apc11p; HSPC214; 1110011I19Rik; RGD1561880; APC11_HUMAN; ANAPC11; Cyclosome subunit 11; Hepatocellular carcinoma-associated RING

	finger protein; APC11_MOUSE; anaphase promoting complex subunit 11; anaphase promoting complex subunit 11 (yeast APC11 homolog)
Dilution	WB=1:500-2000,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	ANAPC11
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 ANAPC2, 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).
Cellular Location	Cytoplasm. Nucleus
Tissue Location	Expressed at high levels in skeletal muscle and heart; in moderate levels in brain, kidney, and liver; and at low levels in colon, thymus, spleen, small intestine, placenta, lung and peripheral blood leukocyte.

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