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ANAPC2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21055a

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q9UJX6
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51676
Calculated MW	93828

Additional Information

Gene ID	29882
Other Names	Anaphase-promoting complex subunit 2, APC2, Cyclosome subunit 2, ANAPC2, APC2, KIAA1406
Target/Specificity	This ANAPC2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 712-746 amino acids from the C-terminal region of human ANAPC2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ANAPC2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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).

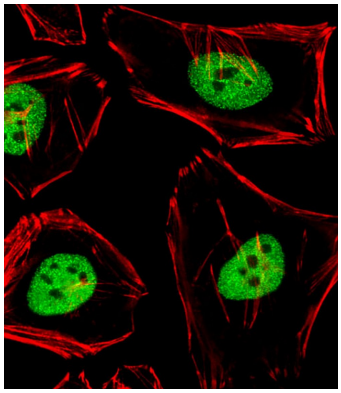
Background

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. The APC/C complex 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. The CDC20-APC/C complex positively regulates the formation of synaptic vesicle clustering at active zone to the presynaptic membrane in postmitotic neurons. CDC20-APC/C-induced degradation of NEUROD2 drives presynaptic differentiation.

References

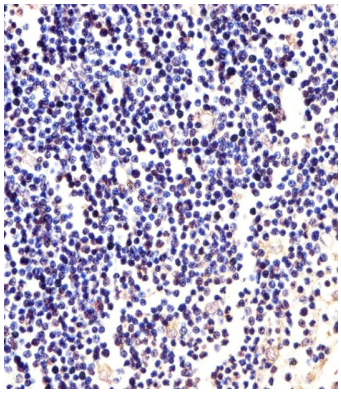
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Nagase T.,et al.DNA Res. 7:65-73(2000).
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Tang Z.,et al.Mol. Biol. Cell 12:3839-3851(2001).

Images

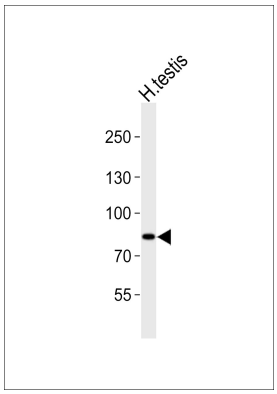


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized Hela (Human Cervical epithelial adenocarcinoma cell line) cells labeling ANAPC2 with AP21055a at 1/25 dilution, followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/400 dilution (green). Confocal image showing nuclear staining on Hela cell line. Cytoplasmic actin is detected with Alexa Fluor® 555 conjugated with Phalloidin (OB16636430) at 1/100 dilution (red).

Immunohistochemical analysis of paraffin-embedded H. thymus section using ANAPC2 Antibody



(C-term)(Cat#AP21055a). AP21055a was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Western blot analysis of lysate from human testis tissue lysate, using ANAPC2 Antibody (C-term)(Cat. #AP21055a). AP21055a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

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