

ANAPC2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21055a

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	<u>Q9UJX6</u>
Reactivity	Human, Mouse
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	Together with the RING-H2 protein ANAPC11, constitutes the catalytic 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 (PubMed:<u>11739784</u>, PubMed:<u>18485873</u>). 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 (PubMed:<u>11739784</u>, PubMed:<u>18485873</u>). The APC/C complex catalyzes assembly of branched 'Lys-11'-/'Lys-48'-linked branched ubiquitin chains on target proteins (PubMed:<u>29033132</u>). 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

Yu H.,et al.Science 279:1219-1222(1998). Humphray S.J.,et al.Nature 429:369-374(2004). Nagase T.,et al.DNA Res. 7:65-73(2000). Nakajima D.,et al.DNA Res. 9:99-106(2002). 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'.