

ANAPC7 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9218c

Specification

ANAPC7 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

09UIX3

ANAPC7 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 51434

Other Names

Anaphase-promoting complex subunit 7, APC7, Cyclosome subunit 7, ANAPC7, APC7

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP9218c was selected from the Center region of human ANAPC7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ANAPC7 Antibody (Center) Blocking Peptide - Protein Information

Name ANAPC7 (HGNC:17380)

Synonyms APC7

Function

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:18485873). 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:18485873). The APC/C complex catalyzes assembly of branched 'Lys-11'-/'Lys-48'-linked branched ubiquitin chains on target proteins (PubMed:29033132). APC7 is not required for the assembly of the APC/C complex,



but has an enzyme-substrate adapter activity mediating the processive ubiquitination of specific substrates (PubMed:34942119). Involved in brain development through the specific ubiquitination and clearance of MKI67 from constitutive heterochromatin after neuronal progenitors exit mitosis (PubMed:34942119).

Cellular Location

Cytoplasm, cytoskeleton. Nucleus Cytoplasm, cytoskeleton, spindle Note=Localizes to spindle during metaphase and to cytoplasmic microtubules during interphase.

ANAPC7 Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

ANAPC7 Antibody (Center) Blocking Peptide - Images

ANAPC7 Antibody (Center) Blocking Peptide - Background

APC7 is one of the subunits of the Anaphase Promoting Complex. APC7 (anaphase-promoting complex subunit 7) is a member of the E3 enzyme family. This protein contains TPR repeats and has a molecular weight of approximately 63 kD. The APC7 protein is located in the nucleus during interphase and the centrosome during metaphase/anaphase. This protein probably recruits Cdh1 into the APC complex. The APC7 protein functions with other members of the APC complex as a multisubunit cell cycle ubiquitin ligase, and a regulator of sister chromatid separation by degrading securins. In addition, this protein functions in ubiquitin-dependent cyclin catabolism, metaphase/anaphase transition, and spindle elongation. The APC6 protein comprises one subunit of the anaphase promoting complex including APC1-8, and other probable complex proteins APC9-11, Cdc26, Mnd2, Swm1. The APC complex is inactivated by protein kinase A and is activated by CDC20 and Cdh1.

ANAPC7 Antibody (Center) Blocking Peptide - References

Nilsson J. et al., Nat Cell Biol 10:1411-20 (2008).