

CDC34 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2116a**Specification**

CDC34 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [P49427](#)
Other Accession [NP_004350](#)

CDC34 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 997

Other Names

Ubiquitin-conjugating enzyme E2 R1, Ubiquitin-conjugating enzyme E2-32 kDa complementing, Ubiquitin-conjugating enzyme E2-CDC34, Ubiquitin-protein ligase R1, CDC34, UBCH3, UBE2R1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2116a](/product/products/AP2116a) was selected from the N-term region of human CDC34. 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.

CDC34 Antibody (N-term) Blocking Peptide - Protein Information

Name CDC34

Synonyms UBCH3, UBE2R1

Function

E2 ubiquitin-conjugating enzyme that accepts ubiquitin from an E1 ubiquitin-activating protein, and catalyzes its covalent attachment to other proteins by an E3 ubiquitin-protein ligase complex (PubMed: [10329681](http://www.uniprot.org/citations/10329681), PubMed: [17588522](http://www.uniprot.org/citations/17588522), PubMed: [20061386](http://www.uniprot.org/citations/20061386), PubMed: [38326650](http://www.uniprot.org/citations/38326650)). In vitro catalyzes 'Lys-48'-linked polyubiquitination (PubMed: [22496338](http://www.uniprot.org/citations/22496338)). Cooperates

with the E2 UBE2D3 and the SCF(FBXW11) E3 ligase complex for the polyubiquitination of NFKBIA leading to its subsequent proteasomal degradation (PubMed:10329681, PubMed:10918611, PubMed:17698585). Performs ubiquitin chain elongation building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin. UBE2D3 acts as an initiator E2, priming the phosphorylated NFKBIA target at positions 'Lys-21' and/or 'Lys-22' with a monoubiquitin. Cooperates with the SCF(SKP2) E3 ligase complex to regulate cell proliferation through ubiquitination and degradation of MYBL2 and KIP1 (PubMed:10871850, PubMed:15652359, PubMed:19112177). Involved in ubiquitin conjugation and degradation of CREM isoform ICERIIgamma and ATF15 resulting in abrogation of ICERIIgamma- and ATF5-mediated repression of cAMP-induced transcription during both meiotic and mitotic cell cycles. Involved in the regulation of the cell cycle G2/M phase through its targeting of the WEE1 kinase for ubiquitination and degradation (PubMed:19126550). Also involved in the degradation of beta-catenin (PubMed:12037680). Is target of human herpes virus 1 protein ICP0, leading to ICP0-dependent dynamic interaction with proteasomes (PubMed:11805320, PubMed:12060736).

Cellular Location

Cytoplasm. Nucleus. Note=The phosphorylation of the C-terminal tail plays an important role in mediating nuclear localization. Colocalizes with beta-tubulin on mitotic spindles in anaphase

Tissue Location

Expressed in testes during spermatogenesis to regulate repression of cAMP-induced transcription

CDC34 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CDC34 Antibody (N-term) Blocking Peptide - Images

CDC34 Antibody (N-term) Blocking Peptide - Background

CDC34 is a member of the ubiquitin-conjugating enzyme family. Ubiquitin-conjugating enzyme catalyzes the covalent attachment of ubiquitin to other proteins. This protein is a part of the large multiprotein complex, which is required for ubiquitin-mediated degradation of cell cycle G1 regulators, and for the initiation of DNA replication.

CDC34 Antibody (N-term) Blocking Peptide - References

Pati, D., et al., Mol. Cell. Biol. 19(7):5001-5013 (1999).Seol, J.H., et al., Genes Dev. 13(12):1614-1626 (1999).Lisztwan, J., et al., EMBO J. 17(2):368-383 (1998).Pagano, M., FASEB J. 11(13):1067-1075 (1997).King, R.W., et al., Science 274(5293):1652-1659 (1996).