

CDC34 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP2116b

Specification

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

Primary Accession P49427
Other Accession NP_004350

CDC34 Antibody (C-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 AP2116b was selected from the C-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 (C-term) Blocking Peptide - Protein Information

Name CDC34

Synonyms UBCH3, UBE2R1

Function

Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro catalyzes 'Lys-48'- linked polyubiquitination (PubMed:22496338). Cooperates with the E2 UBCH5C and the SCF(FBXW11) E3 ligase complex for the polyubiquitination of NFKBIA leading to its subsequent proteasomal degradation. 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. Involved in ubiquitin conjugation and degradation of CREM isoform ICERIIgamma and ATF15 resulting in abrogation of ICERIIgammaand 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. Also involved in the degradation of beta-catenin. Is target of human herpes virus 1 protein ICPO, leading to ICPO-dependent dynamic interaction with proteasomes (PubMed:10329681, PubMed:10373550, PubMed:10871850, PubMed:11675391, PubMed:12037680, PubMed:15652359, PubMed:17461777. PubMed:17698585, PubMed:19112177, PubMed:19126550, PubMed:19945379, PubMed:20061386, PubMed:20347421).

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 (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

CDC34 Antibody (C-term) Blocking Peptide - Images

CDC34 Antibody (C-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 (C-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).