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CDC34 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP19897c

Specification

CDC34 Blocking Peptide (Center) - Product Information

Primary Accession	P49427
Other Accession	Q8CFI2, NP_004350.1

CDC34 Blocking Peptide (Center) - 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 is selected from aa 148-162 of HUMAN CDC34

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 Blocking Peptide (Center) - Protein Information

Name CDC34

Synonyms UBCH3, UBE2R1

CDC34 Blocking Peptide (Center) - Background

The protein encoded by this gene 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. [provided by
RefSeq].

CDC34 Blocking Peptide (Center) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Fernandez-Sanchez, M.E., et al. J. Biol. Chem. 285(23):17390-17397(2010)
Choi, Y.S., et al. J. Biol. Chem. 285(23):17754-17762(2010)
Wu, K., et al. Mol. Cell 37(6):784-796(2010)
Kleiger, G., et al. Cell 139(5):957-968(2009)

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 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. Also involved in the degradation of beta-catenin. Is target of human herpes virus 1 protein ICP0, leading to ICP0-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 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides