

□ Cat # RP-428 **Recombinant Human Ubiquitin Conjugating enzyme 3** Size: □ 10 ug □ 50 ug

Synonyms

Ubiquitin-conjugating enzyme E2 R1, EC 6.3.2.19, Ubiquitin-protein ligase R1, Ubiquitin-conjugating enzyme E2-32 kDa complementing, E2-CDC34, UBC3, UBE2R1.

Introduction:

UbcH3 also called Cdc34 is important in the control of cell cycle and DNA replication. Cdc34 in association with different E3 complexes, including SCF, has been shown to target many different substrates for ubiquitination and degradation during cell division, signal transduction, and development. Cdc34 substrates that have been characterized include IκB, B-Myb, Wee1, MyoD, ICER1ly, ATF5, p27Xic1, and p27Kip1. Additionally, substrates such as β-catenin, p21Cip1, E2F, cyclin E, and cyclin D are putative substrates of Cdc34 by virtue of their SCF requirement for proteolysis. Cdc34 has been demonstrated to self-associate through a domain in the C-terminus, and is phosphorylated and ubiquitinated in vivo. This protein is useful for in vitro ubiquitination reactions.

Description:

Ubiquitin Conjugating Enzyme 3 Human Recombinant produced in E.coli is a 28 kDa protein containing 248 amino acids. The CDC34 protein contains 6xHis tag and is purified by proprietary chromatographic techniques.

Source:

Escherichia Coli.

Physical Appearance:

Sterile Filtered white lyophilized powder.

Formulation:

Lyophilized from a 0.2µm filtered concentrated (1mg/ml) solution in 1X PBS and 1mM DTT, pH 7.5.

Solubility:

It is recommended to reconstitute the lyophilized Ubc3 in sterile water not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Storage and Stability:

Lyophilized CDC34 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution UBC3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity:

Greater than 95.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Amino acid sequence:

MHHHHHHAMGILMARPLVPSSQKALLLELKGLQEEPVEGFRVTL
VDEGDLYNWEVAIFGPPNTYYEGGYFKARLKFPIDYPYSPPAFR
FLTKMWHPNYETGDVCISILHPPVDDPQSGELPSEWRWNPTQNV
RTILLSVISLLNEPNTFSPANVDASVMYRKWKESKGDREYTDIIR
KQVTKVDAERDGVKVPPTLAEYCVKTKAPAPDEGSDLFYDD
YY EDGEVEEEADSCFGDDEDDSGTEES.

Storage and stability:

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4oC for ~1 week or aliquots in suitable size and store at -20oC for long term storage.

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