

Recombinant Human Ubiquitin-conjugating Enzyme E2 C, His

#R00519

Size: 10 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 6 months from date of receipt, -20 to -70 °C as supplied.
- 3 months, -20 to -70 °C under sterile conditions after opening.

**Warning:** This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Ubiquitin Conjugating Enzyme E2 C belongs to the ubiquitin-conjugating enzyme family and is encoded by the UBE2C gene in humans. The ubiquitin-conjugating enzymes, also known as E2 enzymes and more rarely as ubiquitin-carrier enzymes, take part in the second step in the ubiquitination reaction. In this reaction, E1 activates the ubiquitin by covalently attaching the molecule to its active site cysteine residue. The activated ubiquitin is then transferred to an E2 cysteine and then the E2 molecule binds E3 via a structurally conserved binding region. The UBE2C catalyzes the destruction of cyclins A and B in conjunction with the anaphase-promoting complex, and therefore, plays an important role in the control of the cell exit from mitosis. This activity is essential at the end of mitosis for the inactivation of their partner kinase Cdc2 and exit from mitosis into G1 of the next cell cycle. In addition, UBCH10 bears homology to yeast PAS2, a gene that is

essential for biogenesis of peroxisomes. UBCH10 is useful for in vitro ubiquitylation reactions.

AA Sequence

MHHHHHHAMGIRMASQNRDPAATSVAAARKGAEPS
GGAARGPVGKRLQQELMTLMMSGDKGISAFPESDN
LFKWVGTIHGAAGTVYEDLRYKLSLEFPSGYPYNAPT
VKFLTPCYHPNVDQTGNICLDILKEKWSALYDVRTILL
SIQSLLGEPNIDSPLNTHAAELWKNPTAFKKYLQETYS
KQVTSQEP

Product Specification

Synonyms	UbcH10, Ubiquitin Carrier Protein C, Ubiquitin-protein Ligase C
Species	Human
Source	Escherichia coli.
Tags	His
Molecular Weight	Approximately 21.1 kDa, a single non-glycosylated polypeptide chain containing 179 amino acids (a.a.) of human UBE2C/UBCH10 and 12 a.a. vector sequence including 6 × His tag at N-terminus.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Data is not available.
Physical	Sterile Colorless liquid.

Appearance	
Concentration	See CoA.
Formulation	A 0.2 µm filtered concentrated solution in 50 mM HEPES, pH 8.0, with 125 mM NaCl, 10 % Glycerol, 5 % Trehalose, 1 mM DTT.
Endotoxin	Less than 1 EU/µg of rHuUBE2C, His as determined by LAL method.
