

10 Recombinant Human Ubiquitin-conjugating Enzyme E2 C, His

Information

Gene ID		
Accession #		
Alternate Names	UbcH10, Ubiquitin Carrier Protein C, Ubiquitin-protein Ligase C	
Source	Escherichia coli.	
M.Wt	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.	
AA Sequence	MHHHHHHAMG IRMASQNRDP AATSVAAARK GAEPSGGAAR GPVGKRLQQE LMTLMMSGDK GISAFPESDN LFKWVGTIHG AAGTVYEDLR YKLSLEFPSG YPYNAPTVKF LTPCYHPNVD TQGNICLDIL KEKWSALYDV RTILLSIQSL LGEPNIDSPL NTHAAELWKN PTAFKKYLQE TYSKQVTSQE P	
Appearance	Sterile Colorless liquid.	
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	
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.	
Reconstitution	To the second seco	
Biological Activity	Data is not available.	
Shipping Condition	Gel pack.	
Handling	Centrifuge the vial prior to opening.	
Usage	For Research Use Only! Not to be used in humans.	
Components and S	torage	

Components and Storage Per Per

Components	10µg	100µg	500µg
Recombinant Human Ubiquitin-conjugating Enzyme E2 C, His	10µg	100µg	500µg

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- 6 months from date of receipt, -20 to -70 °C as supplied

- 3 months, -20 to -70 °C under sterile conditions after opening

Quality Control	
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/µg of rHuUBE2C, His as determined by LAL method.

Description

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 ubiquitinylation reactions.

Reference

1. Takahashi Y, Ishii Y, Nishida Y, et al. 2006. Cancer Genet Cytogenet, 168: 30-5

2. Bavi P, Uddin S, Ahmed M, et al. 2011. Am J Pathol, 178: 2109-20

3. Chen Z, Zhang C, Wu D, et al. 2011. EMBO J, 30: 2405-19

4. Hao Z, Zhang H, Cowell J. 2012. Tumour Biol, 33: 723-30.

