Recombinant Human Ubiquitin-conjugating Enzyme E2 D3, His

#R00516

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 D3 belongs to the ubiquitin-conjugating enzyme family and is encoded by the UBE2D3 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 ubiquitination reaction can modify proteins and regulate protein degradation. The UBE2D3 is a human homolog of the yeast UBC4/5 family and play many important regulatory roles in inflammation and cancer. It mediates the degradation of a myriad of short-lived regulatory proteins (such as p53 in the presence of E6/E6-AP or MDM2, c-Fos, IκBα, p105) and abnormal proteins and has 88% and 89% sequence identity with UbcH5a and UbcH5b respectively.

AA Sequence

MHHHHHHAMALKRINKELSDLARDPPAQCSAGPVGD
DMFHWQATIMGPNDSPYQGGVFFLTIHFPTDYPFKP
PKVAFTTRIYHPNINSNGSICLDILRSQWSPALTISKVL
LSICSLLCDPNPDDPLVPEIARIYKTDRDKYNRISREW
TQKYAM

Product Specification

Synonyms	Ubiquitin Carrier Protein D3, Ubiquitin-protein Ligase D3
Accession	P61077
GeneID	7323
Species	Human
Source	Escherichia coli.
Tags	His
Molecular Weight	Approximately 17.7 kDa, a single non-glycosylated polypeptide chain containing 147 amino acids (a.a.) of human UBE2D3/UBC5C and 8 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 Appearance	Sterile Colorless liquid.
Concentration	See CoA.
Formulation	A 0.2 μm filtered concentrated solution in 50 mM HEPES, pH 6.5, with 125 mM NaCl, 10 % Glycerol, 5 % Trehalose, 1 mM DTT.
Endotoxin	Less than 1 EU/μg of rHuUBE2D3/UBC5C, His as determined by LAL method.