

Product Name: UBE2D2

Alternate Names: UbcH5b, E2D2

Product Code: TE2-003

Quantity: 100 µg

FOR RESEARCE USE ONLY (RUO)

Storage:

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store \leq -70°C (stable for 24 months from date of receipt).

Verified Applications / Usage

Recombinant Ubiquitin Conjugating Enzyme E2 D2 accepts activated ubiquitin from Ubiquitin Activating Enzyme 1 (an E1) in in vitro reactions. This charged E2 may subsequently transfer ubiquitin to a protein substrate in an E3 Ligase-catalyzed reaction. Appropriate enzyme concentrations are specific to the application.

Physical Characteristics

Species: Homo sapiens (Human)

Predicted MW (kDa): 17.0 kDa

Source: E.coli BL21(DE3) A.I.

Purity: 95%

Concentration: 50 µM

Formulation: 40 mM HEPES, 100 mM NaCl, 10% Glycerol, 1 mM EDTA, 1 mM TCEP, pH 7.6

Shipping: The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.

Stability/Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store \leq -70°C (stable for 24 months from date of receipt).



Quality Assurance

Purity & SDS-PAGE

Protein ID: Ubiquitin-conjugating enzyme E2 D2



 $2~\mu g~UBE2D2$ run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Activity Assay

Verified in Ubiquitin Charging Assay.



Background

Description

Ubiquitin Conjugating Enzyme E2 D2 is a ubiquitin-conjugating enzyme (E2) that plays a key role in the ubiquitylation pathway. It works with various E3 ligases to transfer ubiquitin to substrate proteins, tagging them for proteasomal degradation or regulating their function. UBE2D2 is involved in many cellular processes, including cell cycle control, DNA repair, and signal transduction, due to its ability to participate in both mono- and poly-ubiquitylation. Because of its broad E3 compatibility, fast kinetics and chain-type flexibility, recombinant UBE2D2 is a work-horse reagent in reconstituted UPS assays that demand robust poly-ubiquitylation.

Accession Number: P62837

Entrez Gene ID: UBE2D2



Protein Sequence

GPGSMALKRIHKELNDLARDPPAQCSAGPVGDDMFHWQATIMGPNDS PYQGGVFFLTIHFPTDYPFKPPKVAFTTRIYHPNINSNGSICLDILRSQW SPALTISKVLLSICSLLCDPNPDDPLVPEIARIYKTDREKYNRIAREWTQK YAM