Product Name: UBE2D1

Alternate Names: UbcH5a, UBCH5A

Product Code: TE2-002 **Quantity:** 100 µg

FOR RESEARCE USE ONLY (RUO)

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

Verified Applications / Usage
Recombinant Ubiquitin Conjugating Enzyme E2 D1 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):** 16.9 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

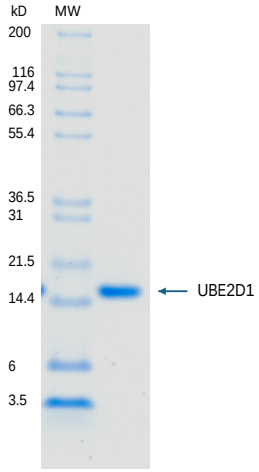
Shipping: The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.

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

Quality Assurance

Purity & SDS-PAGE

Protein ID: Ubiquitin-conjugating enzyme E2 D1



2 µg UBE2D1 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 D1 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. UBE2D1 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 polyubiquitylation. Owing to its broad E3 compatibility and robust kinetics, recombinant UBE2D1 is a staple reagent for in vitro ubiquitylation assays where chain-type plasticity is desirable.

Accession Number: P51668 **Entrez Gene ID:** UBE2D1

Protein Sequence

GPGSMALKRIQKELSDLQRDPPAHCSAGPVGDDLFHWQATIMGPPDS
AYQGGVFFLTVHFPTDYPFKPPKIAFTTKIYHPNINSNGSICLDILRSQW
SPALTVSKVLLSICSLLCDPNPDDPLVPDIAQIYKSDKEKYNRHAREWT
QKYAM