Product Name: UBE2K

Alternate Names: E2-25K, HIP2

Product Code: TE2-009 **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 K 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):** 23 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

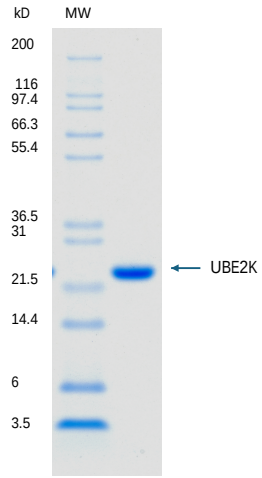
Shipping: The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.

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 K



2 µg UBE2K 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

The UBE2K protein, a ubiquitin-conjugating enzyme (E2), plays a crucial role in polyubiquitylation of proteins, primarily targeting them for degradation via the proteasome. UBE2K is known for its ability to synthesize K48-linked ubiquitin chains, which are a signal for protein degradation.

Accession Number: P61086 **Entrez Gene ID:** UBE2K

Protein Sequence

GPGSMANIAVQRIKREFKEVLKSEETSKNQIKVDLVDENFTELRGEIAGP
PDTPYEGGRYQLEIKIPETYPFNPPKVRFITKIWHPNISSVTGAICLDILKD
QWAAAMTLRTVLLSLQALLAAAEPDDPQDAVVANQYKQNPEMFKQTA
RLWAHVYAGAPVSSPEYTKKIENLCAMGFDRNAVIVALSSKSWDVETA
TELLLSN