Product Name: UBE2V1 / UBE2N

Alternate Names: Uev1a/Ubc13, Uev1a/UbcH13

Product Code: TE2-013

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

Recombinant Ubiquitin Conjugating Enzyme E2 2V1/2N 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: Human

Predicted MW (kDa): UBE2V1: 17 kDa
UBE2N: 17 kDa

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

Purity: 95 %

Tags: UBE2V1: Untagged
UBE2N: Untagged

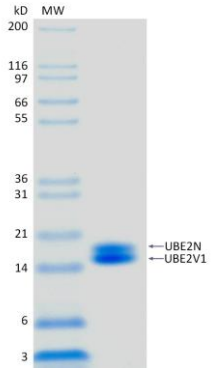
Formulation: 40 mM HEPES, 100 mM NaCl, 10% Glycerol, 1 mM EDTA, 1 mM TCEP, pH 7.6

Shipping: The product is shipped with dry ice. 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



2 µg UBE2V1/UBE2N run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Protein ID: Ubiquitin-conjugating enzyme E2 variant 1, Ubiquitin-conjugating enzyme E2 N

Activity Assay

Verified in Ubiquitin Charging Assay.

Background

Description

UBE2V1 and UBE2N function together as a heterodimer. This complex catalyzes the synthesis of K63-linked polyubiquitin chains that are important in signaling pathways related to DNA repair, stress response, and immune signaling. Recombinant UBE2V1/UBE2N is an important reagent for *in vitro* ubiquitylation assays related to K63-linked polyubiquitin.

Accession Number: Q13404

Entrez Gene ID: UBE2V1

Accession Number: P61088

Entrez Gene ID: UBE2N

Protein Sequences

UBE2V1:

GPGSMAATTGSGVKVPRNFRLLEELEEGQKGVGDGTVSWGLEDDEDMTLTRWTGMIIGPPRTI
YENRIYSLKIECGPKYPEAPPFVRFVTKINMNGVNSSNGVVDPRAISVLAKWQNSYSIKVVLQ
ELRRLMMSKENMKLPQPPEGQCYSN

UBE2N:

GPGSMAGLPRRIIKETQRLLAEPVPGIKAEPDESNARYFHVVIAGPQDSPFEGGTFKLELFLP
EEYPMAAPKVRFMTKIYHPNVDKLGRICLDILKDKWSPALQIRTVLLSIQALLSAPNPDDPLA
NDVAEQWKTNEAQAIETARAWTRLYAMNNI