PRODUCT INFORMATION

Expression system E.coli

Domain 1-200aa

UniProt No. P61086

NCBI Accession No. NP_005330

Alternative Names Ubiguitin-conjugating enzyme E2 K isoform 1, E2-25K, HIP2, HYPG, LIG, UBC1

PRODUCT SPECIFICATION

Molecular Weight

26.5 kDa (236aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 1mM DTT, 10% glycerol, 50mM NaCl

Purity

> 95% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

ubiquitin-conjugating enzyme E2 K isoform 1, also known as uBE2K, is a member of the ubiquitin-conjugating enzymes family. These enzymes participate in a variety of cellular processes, including selective protein degradation, DNA repair, cell cycle control, and sporulation. In this mechanism, the ATP-coupled activation and subsequent ligation of ubiquitin are catalyzed by separate enzymes functionally linked by ubiquitin carrier protein uBC1. Also, uBE2K is reportedly involved in Alzheimer's disease, Huntington's disease and antigen processing through its interaction with amyloid-beta, huntingtin, and MHC-heavy chain proteins. Recombinant



human uBE2K protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGS>MANI AVQRIKREFK EVLKSEETSK NQIKVDLVDE
NFTELRGEIA GPPDTPYEGG RYQLEIKIPE TYPFNPPKVR FITKIWHPNI SSVTGAICLD ILKDQWAAAM TLRTVLLSLQ
ALLAAAEPDD PQDAVVANQY KQNPEMFKQT ARLWAHVYAG APVSSPEYTK KIENLCAMGF DRNAVIVALS SKSWDVETAT
ELLLSN

General References

Chen Z., et al. (1990) J Biol Chem. 264:21835-21742. Pichler A., et al. (2005) Nat Struct Mol. 12:264-269.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.