## **Product** Data Sheet

# **UBE2K Protein, Human (GST)**

HY-P71405 Cat. No.:

Synonyms: Ubiquitin-Conjugating Enzyme E2 K; Huntingtin-Interacting Protein 2; HIP-2; Ubiquitin Carrier

Protein; Ubiquitin-Conjugating Enzyme E2-25 kDa; Ubiquitin-Conjugating Enzyme E2(25K);

Ubiquitin-Conjugating Enzyme E2-25K; Ubiquitin-Protein Ligase; UBE2K; HIP2; LIG

Species: Human Source: E. coli

P61086 (M1-N200) Accession:

Gene ID: 3093

Molecular Weight: Approximately 45.0 kDa

### **PROPERTIES**

ΛΛ	500		nce
AA	sec	ıue	nce

MANIAVQRIK REFKEVLKSE ETSKNQIKVD LVDENFTELR GEIAGPPDTP YEGGRYOLEI KIPETYPFNP PKVRFITKIW  $\mathsf{A} \; \mathsf{A} \; \mathsf{A} \; \mathsf{M} \; \mathsf{T} \; \mathsf{L} \; \mathsf{R} \; \mathsf{T} \; \mathsf{V} \; \mathsf{L}$ HPNISSVTGA ICLDILKDQW LSLQALLAAA EPDDPQDAVV ANQYKQNPEM FKQTARLWAH VYAGAPVSSP EYTKKIENLC AMGFDRNAVI VALSSKSWDV ETATELLSN

**Biological Activity** 

The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

**Appearance** 

Solution.

**Formulation** 

Supplied as a 0.2 µm filtered solution of 50 mM HEPES, 150 mM NaCl, 2 mM DTT, 10% Glycerol, pH 7.5.

**Endotoxin Level** 

<1 EU/µg, determined by LAL method.

Reconsititution

N/A

Storage & Stability

Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

**Shipping** 

Shipping with dry ice

#### **DESCRIPTION**

#### Background

UBE2K, a pivotal component of the ubiquitin-proteasome system, serves as an E2 ubiquitin-conjugating enzyme, playing a crucial role in the covalent attachment of ubiquitin to diverse substrate proteins. In vitro studies reveal its capability to catalyze the synthesis of 'Lys-48'-linked polyubiquitin chains, particularly in the presence or absence of the BRCA1-BARD1 E3 ubiquitin-protein ligase complex. Notably, UBE2K is implicated in mediating the selective degradation of short-lived and aberrant proteins, participating in processes such as endoplasmic reticulum-associated degradation (ERAD) of misfolded lumenal proteins. Furthermore, UBE2K demonstrates ubiquitination activity towards various targets, including huntingtin,

p53/TP53, and potentially NF-kappa-B. Additionally, its involvement in viral infections is suggested, where UBE2K may contribute to the degradation of MHC class I heavy chains and participate in the HPV E7 protein-dependent degradation of RB1.

Caution: Product has not been fully validated for medical applications. For research use only.

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