UbcH7/UBE2L3 Protein, Human

Cat. No.:	HY-P79451
Synonyms:	Ubiquitin-conjugating enzyme E2 L3; UBE2L3; E2 ubiquitin-conjugating enzyme L3; L-UBC; UbcH7; Ubiquitin carrier protein L3; Ubiquitin-conjugating enzyme E2-F1; Ubiquitin-protein ligase L3; UBCE7
Species:	Human
Source:	E. coli
Accession:	P68036 (M1-D154)
Gene ID:	7332
Molecular Weight:	Approximately 18 kDa

PROPERTIES

AA Sequence	M A A S R R L M K E L E E I R K C G M K N F R N I Q V D E A N L L T W Q G L I V P D N P P Y D K G A F R I E I N F P A E Y P F K P P K I T F K T K I Y H P N I D E K G Q V C L P V I S A E N W K P A T K T D Q V I Q S L I A L V N D P Q P E H P L R A D L A E E Y S K D R K K F C K N A E E F T K K Y G E K R P V D
Biological Activity	Recombinant Human UbcH7/UBE2L3 is a member of the Ubiquitin-conjugating (E2) enzyme family that receives Ubiquitin from a Ubiquitin-activating (E1) enzyme and subsequently interacts with a Ubiquitin ligase (E3) to conjugate Ubiquitin to substrate proteins.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.22 μm filtered solution of 20 mM Hepes, 50 mM Nacl, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	UbcH7/UBE2L3, a ubiquitin-conjugating enzyme E2, exhibits specificity in collaboration with HECT-type and RBR family E3 ubiquitin-protein ligases. Notably, its unique characteristic is the absence of intrinsic E3-independent reactivity with lysine, rendering it incompatible with most RING-containing E3 ubiquitin-protein ligases. However, it demonstrates activity with RBR family E3 enzymes such as PRKN, RNF31, and ARIH1, functioning akin to RING-HECT hybrids. Acting downstream of the

E1 complex, UbcH7 catalyzes the covalent attachment of ubiquitin to target proteins and, in vitro, facilitates 'Lys-11'-linked polyubiquitination. Its involvement in the selective degradation of short-lived and aberrant proteins highlights its role in cellular quality control. Additionally, down-regulation during the S-phase suggests a contribution to cell cycle progression, while its impact on nuclear hormone receptors' transcriptional activity and potential role in myelopoiesis further underscore its multifaceted functions.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA