

## Recombinant Human UBE2D4 Protein (His Tag)

Catalog No. PKSH030702

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

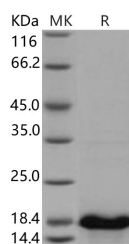
### Description

<b>Synonyms</b>	Ubiquitin-Conjugating Enzyme E2 D4;HBUCE1;Ubiquitin Carrier Protein D4;Ubiquitin-Protein Ligase D4;UBE2D4;UBCH5D
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Met 1-Met 147
<b>Accession</b>	Q9Y2X8
<b>Calculated Molecular Weight</b>	17.5 kDa
<b>Observed molecular weight</b>	18.5 kDa
<b>Tag</b>	N-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile 20mM Tris, 0.1M NaCl, 10% glycerol, 2mM DTT, pH 8.0 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

UBE2D4 is a member of the ubiquitin-conjugating E2 family whose members perform the second step in the

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ubiquitination reaction. Initially identified as the main process for protein degradation; ubiquitination is believed nowadays to be crucial for a wider range of cellular processes. The outcome of the ubiquitin-conjugation reaction; and thereby the fate of the substrate; is heavily dependent on the number of ubiquitin molecules attached and how these ubiquitin molecules are inter-connected. To deal with this complexity and to allow adequate ubiquitination in time and space; a highly sophisticated conjugation machinery has been developed. In a sequential manner; ubiquitin becomes activated by an ubiquitin-activating enzyme (E1); which then transfers the ubiquitin to a group of ubiquitin-conjugating enzymes (E2s). Next; ubiquitin-loaded E2s are interacting with ubiquitin protein ligases (E3s) and ubiquitin is conjugated to substrates on recruitment by the E3. These three key enzymes are operating in a hierarchical system; wherein two E1s and 35 E2s have been found and hundreds of E3s have been identified in humans. It has been identified the UBE2D family (UBE2D1-4) as E2 partners for IDOL that support both autoubiquitination and IDOL-dependent ubiquitination of the LDLR in a cell-free system.