

Recombinant Human UBE2D4 Protein (His Tag)

Catalog Number: PKSH030702

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

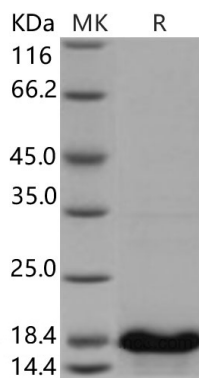
Description

Species	Human
Source	E.coli-derived Human UBE2D4 protein Met 1-Met 147, with an N-terminal His
Calculated MW	17.5 kDa
Observed MW	18.5 kDa
Accession	Q9Y2X8
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	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.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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