



Recombinant Protein Technical Manual

Recombinant Human UBE2D4 Protein (His Tag)

RPES0797

Product Data:

Product SKU: RPES0797

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: Q9Y2X8

Protein Information:

Molecular Mass:

AP Molecular Mass: 18.5 kDa

Tag: N-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Ubiquitin-Conjugating Enzyme E2 D4; HBUCE1; Ubiquitin Carrier Protein D4; Ubiquitin-Protein Ligase D4; UBE2D4; UBCH5D

Immunogen Information:

Sequence: Met 1-Met 1474

Background:

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.