Recombinant UB2E3 protein (His tag)

Catalog Number	543340
Synonyms	E2 ubiquitin-conjugating enzyme E3; UbcH9; Ubiquitin carrier protein E3; Ubiquitin-conjugating enzyme E2-23 kDa; Ubiquitin-protein ligase E3
Species	Human
Expression System	E. coli
Accession	Q969T4
Molecular Weight	Predictes a molecular mass of 18.39 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	58-207
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 58-207 aa (Q969T4) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Ubiquitin-conjugating enzyme E2 E3 (UBE2E3) Fragment (aa 58-207) is a high-purity protein designed for studying ubiquitination mechanisms. This fragment encompasses the essential UBC core domain, making it an ideal tool for investigating E2 enzyme activity, polyubiquitin chain formation, and its role in cellular processes such as sodium transport regulation. The full-length Ubiquitin-conjugating enzyme E2 E3 (UBE2E3) is a key enzyme in the ubiquitin-proteasome system, accepting ubiquitin from E1 complexes and catalyzing its covalent attachment to target proteins. It facilitates 'Lys-11'-, 'Lys-48'-, and 'Lys-63'-linked polyubiquitination, which are critical for protein degradation, signaling, and cellular regulation. UBE2E3 participates in transepithelial sodium transport in renal cells, highlighting its importance in physiological homeostasis. The enzyme localizes to both the nucleus and cytoplasm, shuttling between these compartments in an IPO11-dependent manner, indicating its involvement in diverse subcellular processes. This recombinant fragment retains the functional UBC core domain, enabling focused studies on its catalytic and regulatory roles.