Recombinant UBE2F protein (His tag)

Catalog Number	540932
Synonyms	NEDD8 carrier protein UBE2F; NEDD8 protein ligase UBE2F; NEDD8-conjugating enzyme 2; RING-type E3 NEDD8 transferase UBE2F; Ubiquitin-conjugating enzyme E2 F
Species	Human
Expression System	E. coli
Accession	Q969M7
Molecular Weight	Predictes a molecular mass of 22.73 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	1-185
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-185 aa (Q969M7) 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 UBE2F (1-185) is a high-purity protein fragment encompassing the complete UBC core domain of the NEDD8-conjugating enzyme UBE2F. This product is ideal for investigating the enzyme's role in neddylation pathways, particularly its specific interaction with cullin-5 and involvement in targeted protein degradation mechanisms. UBE2F is a crucial E2 enzyme in the neddylation cascade, accepting NEDD8 from the UBA3-NAE1 E1 complex and catalyzing its covalent attachment to target proteins. It specifically neddylates cullin-5 (CUL5) in partnership with the E3 ligase RNF7/RBX2, but does not modify other cullins like CUL1-4. This activity regulates cullin-RING ligase complexes, including the CUL9-RBX1 complex, and plays a role in viral pathogenesis by facilitating HIV-1 Vif-mediated degradation of APOBEC3G through CUL5 neddylation. The provided fragment contains the essential catalytic UBC core domain, enabling functional studies of NEDD8 transfer mechanisms.