Recombinant UB2D2 protein (His tag)

Catalog Number	544769
Synonyms	(E3-independent) E2 ubiquitin-conjugating enzyme D2; E2 ubiquitin-conjugating enzyme D2; Ubiquitin carrier protein D2; Ubiquitin-conjugating enzyme E2(17)KB 2; Ubiquitin-conjugating enzyme E2-17 kDa 2; Ubiquitin-protein ligase D2; p53-regulated ubiquitin-conjugating enzyme 1
Species	Human
Expression System	E. coli
Accession	P62837
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	1-147
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 1-147 aa (P62837) 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 D2 (UBE2D2) Fragment (aa 1-147) is a high-purity protein designed for studying ubiquitination mechanisms. This fragment encompasses the complete UBC core domains, making it an ideal tool for investigating E2 enzyme activity, Lys-48-linked polyubiquitination, and protein degradation pathways in controlled experimental settings. Ubiquitin-conjugating enzyme E2 D2 (UBE2D2) is a crucial enzyme in the ubiquitin-proteasome system that accepts ubiquitin from E1 complexes and catalyzes its covalent attachment to target proteins. It specifically mediates 'Lys-48'-linked polyubiquitination, leading to the selective degradation of short-lived and abnormal proteins. The enzyme plays significant roles in multiple cellular processes, including p53 regulation via E6/E6-AP-induced ubiquitination, NFKBIA degradation, viral activation of IRF3, and mitochondrial MAVS activation in response to viral infection. UBE2D2 also mediates ubiquitination of various substrates including PEX5, SQSTM1, and facilitates autoubiquitination of STUB1 and TRAF6, positioning it as a key regulator of protein quality control and cellular signaling pathways.