Recombinant COMD6 protein (His tag)

Catalog Number	545303
Species	Human
Expression System	E. coli
Accession	Q7Z4G1
Molecular Weight	Predictes a molecular mass of 11.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	1-85
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-85 aa (Q7Z4G1) 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 COMMD6 (COMM domain-containing protein 6) Fragment (1-85) is a high-purity protein designed to encompass the complete COMM domain, enabling targeted studies of its role in scaffolding the commander complex, modulating cullin-RING E3 ubiquitin ligase activity, and regulating NF-kappa-B signaling pathways. COMMD6 is a scaffold protein integral to the commander complex, which is essential for endosomal recycling of transmembrane cargos. It functions by assembling the CCC and retriever subcomplexes, facilitating cargo retrieval and trafficking. Additionally, COMMD6 modulates the activity of cullin-RING E3 ubiquitin ligase (CRL) complexes, influencing protein ubiquitination and degradation. It also acts as a negative regulator of NF-kappa-B activation, particularly inhibiting TNF-induced NFKB1 signaling, which underscores its role in immune and inflammatory responses. The protein localizes to both the nucleus and cytoplasm, reflecting its involvement in diverse cellular processes, from transcriptional regulation to cytoplasmic signaling networks.