Recombinant COMD3 protein (His tag)

Catalog Number	546158
Synonyms	Protein Bup; Protein PIL
Species	Human
Expression System	E. coli
Accession	Q9UBI1
Molecular Weight	Predictes a molecular mass of 23.81 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	1-195
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 1-195 aa (Q9UBI1) 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 COMMD3 (COMM domain-containing protein 3) Fragment (aa 1-195) is a high-purity protein designed for studying the COMM domain's role in endosomal recycling, NF-kappa-B regulation, and epithelial sodium transport. This fragment fully encompasses the functional COMM domain, providing an ideal tool for domain-specific functional assays and interaction studies. COMM domain-containing protein 3 (COMMD3) is a scaffold protein essential for the commander complex, which mediates endosomal recycling of transmembrane cargos. It modulates cullin-RING E3 ubiquitin ligase (CRL) complexes, down-regulates NF-kappa-B activation, and regulates apical expression of amiloride-sensitive sodium channel (ENaC) subunits in epithelial cells, influencing Na+ transport. The protein localizes to both the cytoplasm and nucleus, highlighting its diverse regulatory roles in cellular signaling and trafficking pathways.