Recombinant C2CD3 protein (His tag)

Catalog Number	547394
Species	Human
Expression System	E. coli
Accession	Q4AC94
Molecular Weight	Predictes a molecular mass of 21.09 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	528-702
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 528-702 aa (Q4AC94) 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 C2CD3 (C2 domain-containing protein 3) Fragment (residues 528-702) is a highly stable and soluble protein unit designed for structural and biochemical studies. This fragment supports research into centriole elongation and ciliary assembly mechanisms, offering a reliable tool for exploring cellular organization and signaling pathways. The full-length C2CD3 protein is a critical component of centrioles in human cells, functioning as a positive regulator of centriole elongation. It plays a key role in assembling the distal appendage of the mother centriole, which anchors the cilium and recruits essential proteins like CEP83, SCLT1, CEP89, FBF1, and CEP164. C2CD3 is required for primary cilium formation, sonic hedgehog (SHH) signaling, and proteolytic processing of GLI3, highlighting its importance in cellular signaling and development. It localizes to centrioles, procentrioles, centriolar satellites, and the distal ends of mother and daughter centrioles, with its distribution dependent on PCM1 and dynein-mediated transport. This protein is vital for understanding centrosomal function and cilia-related processes.