Recombinant CCD61 protein (His tag)

Catalog Number	546358
Synonyms	Coiled-coil domain-containing protein 61; VFL3 homolog
Species	Human
Expression System	E. coli
Accession	Q9Y6R9
Molecular Weight	Predictes a molecular mass of 33.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	1-280
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 1-280 aa (Q9Y6R9) 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 CCDC61 (1-280) is a high-quality protein fragment of Centrosomal protein CCDC61, specifically engineered for structural and biochemical studies. This 280-amino acid fragment represents a stable and soluble unit of the microtubule-binding centrosomal protein, making it ideal for investigating centriole cohesion, microtubule anchoring, and centrosome positioning mechanisms. CCDC61 (Coiled-coil domain-containing protein 61) is a crucial microtubule-binding centrosomal protein in human cells that plays multiple essential roles in cellular organization. The full-length protein is required for centriole cohesion independently of the CEP250 and rootletin linker system. During interphase, CCDC61 anchors microtubules at the mother centriole subdistal appendages and regulates centrosome positioning. In mitosis, it contributes to spindle assembly and chromatin alignment by organizing spindle microtubules into symmetrical structures. The protein localizes to the centrosome, centriolar satellite, and cilium basal body, with specific positioning at centriole subdistal appendages and proximal ends. While initially proposed to recruit CEP170 to centrosomes, this function remains unconfirmed. CCDC61 also plays a non-essential role in ciliogenesis processes. The protein's localization at centriolar satellites depends on an intact microtubule network, and it shows dynamic redistribution to centrosomal/satellite-like structures during centrosome separation in early G2 phase.