Recombinant DRC2 protein (His tag)

Catalog Number	543096
Synonyms	Coiled-coil domain-containing protein 65; Testis development protein NYD-SP28
Species	Human
Expression System	E. coli
Accession	Q8IXS2
Molecular Weight	Predictes a molecular mass of 54.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 62 kDa band.

Product Information

Sequence Region	1-441
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 1-441 aa (Q8IXS2) 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 Dynein Regulatory Complex Subunit 2 (CCDC65) Fragment (1-441) is a high-purity, stable protein designed for structural and functional studies. This fragment, derived from the full-length CCDC65 protein, is optimized for solubility and stability, making it an ideal tool for investigating ciliary and flagellar motility mechanisms in cellular and biochemical assays. Dynein Regulatory Complex Subunit 2 (CCDC65) is a critical component of the nexin-dynein regulatory complex (N-DRC), which plays a key role in regulating ciliary and flagellar motility. It functions to maintain axoneme alignment and integrity, control microtubule sliding in motile axonemes, and stabilize inner dynein arms and radial spokes. By coassembling with DRC1, it forms a central scaffold essential for N-DRC assembly and attachment to outer doublet microtubules. The protein localizes to the cytoplasm, cytoskeleton, flagellum basal body, axoneme, and cilia/flagella projections, underscoring its importance in cellular motility and structural organization. This recombinant fragment supports research into ciliary dysfunctions and related disorders.