Recombinant DRC7 protein (His tag)

Catalog Number	538452
Synonyms	Coiled-coil domain-containing protein 135; Coiled-coil domain-containing protein lobo homolog
Species	Human
Expression System	E. coli
Accession	Q8IY82
Molecular Weight	Predictes a molecular mass of 57.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 64 kDa band.

Product Information

Sequence Region	412-874
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 412-874 aa (Q8IY82) 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 DRC7 Protein Fragment (412-874) is a high-quality, stable, and soluble protein fragment derived from Dynein regulatory complex subunit 7. This product is ideal for structural and biochemical studies, enabling researchers to investigate the regulatory mechanisms of ciliary and flagellar motility in a well-characterized, functional unit. Dynein regulatory complex subunit 7 (DRC7), also known as Coiled-coil domain-containing protein 135, is a critical component of the nexin-dynein regulatory complex (N-DRC) in humans. This complex plays a key role in regulating ciliary and flagellar motility by maintaining axoneme alignment and integrity and controlling microtubule sliding in motile axonemes. DRC7 is essential for male fertility, sperm head morphogenesis, and sperm flagellum formation. The protein localizes to cilia and flagella, specifically within the axoneme, where it associates with outer doublet microtubules. The provided fragment (residues 412-874) was selected for its stability and solubility, supporting research into DRC7's functional domains without the full-length protein's complexity.