Recombinant CC146 protein (His tag)

Catalog Number	547698
Species	Human
Expression System	E. coli
Accession	Q8IYE0
Molecular Weight	Predictes a molecular mass of 55.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 63 kDa band.

Product Information

Sequence Region	436-891
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 436-891 aa (Q8IYE0) 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 CCDC146 (436-891) is a high-purity, soluble fragment of the human Coiled-coil domain-containing protein 146, essential for sperm flagellum biogenesis and male fertility. This 456-amino acid fragment is optimized for structural and biochemical studies, offering researchers a stable tool to investigate centrosomal and flagellar functions. The full-length Coiled-coil domain-containing protein 146 (CCDC146) is critical for sperm flagellum development and male fertility in humans. It localizes to key cellular structures including the centrosome, centriole, flagellum axoneme, cilium basal body, and midbody, with specific association to the mother centriole in sperm cells. Its role in microtubule organization and flagellar integrity makes it a significant protein for reproductive biology and cytoskeletal research. Notably, it has been observed at the periphery of pathogen-containing vacuoles during Chlamydia trachomatis infection, suggesting potential involvement in host-pathogen interactions.