Recombinant CCD42 protein (His tag)

Catalog Number	549339
Species	Human
Expression System	E. coli
Accession	Q96M95
Molecular Weight	Predictes a molecular mass of 34.69 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	44-316
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 44-316 aa (Q96M95) 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 Coiled-coil domain-containing protein 42 (CCDC42) fragment (aa 44-316) - A highly stable and soluble protein fragment essential for male fertility and sperm development, specifically engineered for structural and biochemical research applications. Coiled-coil domain-containing protein 42 (CCDC42) is essential for male fertility and required for proper sperm development. This protein exhibits dynamic subcellular localization throughout spermatogenesis, initially appearing weakly in the cytoplasm of round spermatids, then localizing to manchette microtubules and the perinuclear ring in elongating spermatids. In mature sperm, CCDC42 strongly localizes to the flagellar principle piece, with additional presence in the connecting piece and midpiece. The protein also localizes to the centrosome in somatic cells, indicating potential roles in microtubule organization and cellular structure. The selected fragment (amino acids 44-316) represents a computationally optimized stable and soluble unit, making it ideal for investigating the structural basis of CCDC42's critical functions in reproductive biology.