Recombinant CFA58 protein (His tag)

Catalog Number	542842
Synonyms	Coiled-coil domain-containing protein 147
Species	Human
Expression System	E. coli
Accession	Q5T655
Molecular Weight	Predictes a molecular mass of 59.17 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 69 kDa band.

Product Information

Sequence Region	357-835
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 357-835 aa (Q5T655) 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	This recombinant protein corresponds to a 479-amino acid fragment (residues 357-835) of human Cilia- and flagella-associated protein 58 (CFAP58), a key regulator of sperm flagellar axoneme assembly and primary cilium elongation. The fragment has been computationally optimized for stability and solubility, making it ideal for structural studies and functional assays. Cilia- and flagella-associated protein 58 (CFAP58), also known as coiled-coil domain-containing protein 147, plays an essential role in the assembly and organization of the sperm flagellar axoneme, as demonstrated in PubMed:32791035. It is required for the elongation of both the primary cilium and the sperm flagellar midpiece, functioning through modulation of the Notch signaling pathway. The protein localizes to cilia, flagella, and the centrosome, with specific concentration in the flagellar midpiece, and co-localizes with ODFP2 at the centrosome, underscoring its importance in cytoskeletal and cellular projection dynamics.