Recombinant CFA54 protein (His tag)

Catalog Number	549888
Species	Human
Expression System	E. coli
Accession	Q96N23
Molecular Weight	Predictes a molecular mass of 58.28 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 59 kDa band.

Product Information

Sequence Region	58-548
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 58-548 aa (Q96N23) 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 Cilia- and flagella-associated protein 54 (CFAP54) fragment (residues 58-548) is a high-quality, stable protein designed for structural and functional studies. This 491-amino acid fragment preserves key features of CFAP54, which is essential for cilia and flagella assembly, offering researchers a reliable tool for investigating ciliary biology and associated disorders. Cilia- and flagella-associated protein 54 (CFAP54), encoded by the CFAP54 gene in humans, is required for the assembly and function of cilia and flagella, which are critical for cellular motility, signaling, and sensory processes. According to functional annotations, CFAP54 plays a direct role in maintaining the integrity of these structures, with implications in developmental and physiological pathways. The protein localizes to the cytoplasm, cytoskeleton, and specifically the cilium axoneme, highlighting its involvement in the structural framework of cilia. This recombinant fragment (residues 58-548) was selected based on computational predictions to ensure solubility and stability, facilitating experimental applications without containing known domains, thereby supporting focused biochemical and structural analyses.