Recombinant CF184 protein (His tag)

Catalog Number	550359
Species	Human
Expression System	E. coli
Accession	Q2M329
Molecular Weight	Predictes a molecular mass of 41.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	215-555
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 215-555 aa (Q2M329) 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 CFAP184 (Cilia- and flagella-associated protein 184) fragment (amino acids 215-555) from Homo sapiens, designed for structural and functional studies of ciliary beating regulation. This stable, soluble fragment enables detailed biochemical and structural analyses of CFAP184's role in connecting radial spoke 3 to inner dynein arms and the nexin-dynein regulatory complex. CFAP184, in complex with CFAP263, functions as a key regulator of ciliary beating by forming a structural connection between radial spoke 3 (RS3), the inner dynein arm (IDA), and the nexin-dynein regulatory complex (N-DRC). This complex is positioned parallel to N-DRC and bridges the arch at the base of RS3 with IDA tail and N-DRC components. The protein localizes specifically to cilia (but not ciliary tips) and is also found at the centrosome within the microtubule organizing center, highlighting its fundamental role in cytoskeletal organization and ciliary function. The provided fragment represents a computationally optimized stable domain suitable for investigating these critical molecular interactions.