Recombinant CFA91 protein (His tag)

Catalog Number	547600
Synonyms	CFAP91; AMY-1-associating protein expressed in testis 1; AAT-1; MYCBP/AMY-1-associated testis-expressed protein 1; Protein MAATS1
Species	Human
Expression System	E. coli
Accession	Q7Z4T9
Molecular Weight	Predictes a molecular mass of 34.69 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	488-767
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 488-767 aa (Q7Z4T9) 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 CFAP91 Fragment (488-767) is a high-quality protein product designed for structural and functional studies. This 280-amino acid fragment of Cilia- and Flagella-Associated Protein 91 (CFAP91), also known as MAATS1, represents a stable and soluble unit ideal for investigating axonemal organization and sperm flagellum function. CFAP91 is a human protein critically involved in sperm flagellum axonemal organization and function, with evidence suggesting additional roles in regulating cilium motility through radial spoke assembly. The protein localizes to multiple cellular compartments including mitochondria, cytoplasm, and specifically the cilium axoneme, with particular concentration in the sperm neck region. These localization patterns reflect its multifunctional nature in cellular motility systems. The selected fragment (488-767) was computationally optimized to provide a stable, soluble representation of the protein suitable for detailed biochemical characterization and structural analysis.