Recombinant CBY3 protein (His tag)

Catalog Number	550830
Species	Human
Expression System	E. coli
Accession	A6NI87
Molecular Weight	Predictes a molecular mass of 17.70 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	69-204
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 69-204 aa (A6NI87) 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 CBY3 (Sperm Annulus Positioning Complex Subunit Chibby3) Fragment (aa 69-204) is a high-purity, soluble protein fragment designed for structural and functional studies. This 136-amino acid fragment represents a stable domain of CBY3, optimized for biochemical and biophysical analyses to support research in sperm biology and flagellar function. The full-length Sperm Annulus Positioning Complex Subunit Chibby3 (CBY3) plays a critical role in sperm flagellum organization by ensuring proper annulus positioning at the junction between the midpiece and principal piece. This septin-based ring structure acts as both a physical barrier and membrane diffusion barrier, essential for maintaining sperm motility and functional integrity. CBY3 forms a complex with CIBAR1 that localizes to the flagellar pocket's curved membrane region, providing stability to prevent membrane deformation and halting annulus migration. The protein is specifically localized to the annulus within the sperm flagellum, highlighting its specialized function in male reproductive biology.