Recombinant HYDIN protein (His tag)

Catalog Number	540424
Species	Human
Expression System	E. coli
Accession	Q4G0P3
Molecular Weight	Predictes a molecular mass of 28.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	984-1216
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 984-1216 aa (Q4G0P3) 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 Hydrocephalus-inducing protein homolog (HYDIN) fragment (aa 984-1216) - A highly stable and soluble protein fragment ideal for structural biology studies and functional investigations of ciliary motility mechanisms. The full-length Hydrocephalus-inducing protein homolog (HYDIN) is essential for ciliary motility, playing a critical role in the proper function of motile cilia. This protein localizes specifically to the cilium axoneme, the core structural component of cilia and flagella, where it contributes to the coordinated beating and movement of these cellular projections. The protein's localization in the cilium axoneme is dependent on SPEF1, highlighting its integration into the complex regulatory network governing ciliary function. Mutations in HYDIN have been associated with ciliary dysfunctions, underscoring its importance in cellular motility and fluid movement processes.