Recombinant DNAI2 protein (His tag)

Catalog Number	548197
Synonyms	Axonemal dynein intermediate chain 2
Species	Human
Expression System	E. coli
Accession	Q9GZS0
Molecular Weight	Predictes a molecular mass of 57.31 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 64 kDa band.

Product Information

Sequence Region	79-567
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 79-567 aa (Q9GZS0) 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	This product is a recombinant fragment of Dynein axonemal intermediate chain 2 (DNAI2), encompassing amino acids 79-567. It is designed for structural and biochemical studies, offering a stable and soluble unit ideal for investigating the role of this protein in respiratory cilia function. Dynein axonemal intermediate chain 2 is a component of the dynein complex within respiratory cilia, where it contributes to ciliary motility essential for airway clearance. The full-length protein localizes to the cytoplasm, cytoskeleton, and specifically the cilium axoneme, with enrichment in the proximal region of respiratory cilia. This localization underscores its critical role in the structural and functional integrity of motile cilia, which are vital for respiratory health and mucociliary transport.