Recombinant DNAI4 protein (His tag)

Catalog Number	549512
Synonyms	WD repeat-containing protein 78
Species	Human
Expression System	E. coli
Accession	Q5VTH9
Molecular Weight	Predictes a molecular mass of 44.16 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 44 kDa band.

Product Information

Sequence Region	468-848
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 468-848 aa (Q5VTH9) 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 Dynein Axonemal Intermediate Chain 4 (DNAI4) Fragment (468-848) is a high-quality, stable protein fragment derived from human DNAI4, designed for structural and biochemical studies. This 381-amino acid fragment retains key features of the full-length protein, offering researchers a soluble and functional tool to explore dynein complex assembly and ciliary motility mechanisms. Dynein Axonemal Intermediate Chain 4, encoded by the DNAI4 gene in humans, plays a critical role in the assembly of the axonemal dynein complex, which is essential for ciliary and flagellar motility. This function is vital for processes such as cellular movement and fluid transport in various tissues. The protein is localized to the axoneme of cilia and flagella within the cytoskeleton, where it contributes to the structural and functional integrity of these motile organelles. The provided recombinant fragment (residues 468-848) represents a stable, soluble region selected for experimental applications, enabling detailed investigation into dynein-mediated mechanisms without the complexities of the full-length protein.