Recombinant IFT46 protein (His tag)

Catalog Number	532722
Synonyms	Abnormal dye filling protein 6
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q0G838
Gene ID	3565899
Molecular Weight	Predictes a molecular mass of 30.94 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	217-471
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 217-471 aa (Q0G838) 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 Intraflagellar transport protein 46 homolog (Abnormal dye filling protein 6) fragment (amino acids 217-471) from Caenorhabditis elegans. This 255-amino acid fragment is engineered for stability and solubility, ideal for structural and biochemical studies of ciliary transport mechanisms. The full-length Intraflagellar transport protein 46 homolog (encoded by the dyf-6 gene) is a key component of the intraflagellar transport (IFT) complex B, essential for protein transport within motile cilia. It facilitates ciliary entry and transport of specific cargo proteins like che-3, which are critical for cilium motility. This protein is necessary for the proper morphology and function of ciliated amphid sensory neurons in C. elegans. It localizes to the cilium, cilium basal body, dendrites, and perikaryon, with high expression in transition zones between the basal body and dendrites, underscoring its role in ciliary assembly and sensory neuron integrity.