Recombinant ODAD4 protein (His tag)

Catalog Number	548018
Synonyms	Tetratricopeptide repeat protein 25; TPR repeat protein 25
Species	Human
Expression System	E. coli
Accession	Q96NG3
Molecular Weight	Predictes a molecular mass of 39.24 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 44 kDa band.

Product Information

Sequence Region	184-508
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 184-508 aa (Q96NG3) 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 recombinant protein product features a stable and soluble fragment (residues 184-508) of human Outer Dynein Arm-Docking Complex Subunit 4 (TPR repeat protein 25), encoded by the ODAD4 gene. Designed for structural and biochemical studies, this fragment supports research into ciliary motility mechanisms by providing a functional unit of the protein essential for dynein arm assembly. Outer Dynein Arm-Docking Complex Subunit 4 is a critical component of the outer dynein arm-docking complex (ODA-DC), which facilitates the attachment of outer dynein arms to doublet microtubules in ciliary axonemes. This process is vital for proper ciliary function and motility, as it enables the coordinated movement required for cellular processes such as fluid propulsion and sensory signaling. The protein localizes to the cytoplasm and cilium axoneme, underscoring its role in cytoskeletal organization. Dysfunction in this protein can impair ciliary motion, linking it to ciliopathies and respiratory or reproductive disorders. The provided fragment offers a focused tool for investigating these mechanisms without the complexities of the full-length protein.