Recombinant TBCD protein (His tag)

Catalog Number	535816
Synonyms	Tubulin folding cofactor D homolog
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q19493
Gene ID	172622
Molecular Weight	Predictes a molecular mass of 37.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	1-316
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 1-316 aa (Q19493) 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 Tubulin-specific chaperone D (Tubulin folding cofactor D homolog) from Caenorhabditis elegans, encompassing amino acids 1-316. This fragment is engineered for stability and solubility, ideal for investigating tubulin folding mechanisms and microtubule dynamics in structural and biochemical studies. Tubulin-specific chaperone D is a tubulin-folding protein integral to the initial phase of the tubulin folding pathway, facilitating proper tubulin structure formation. It contributes to microtubule polymerization, as evidenced by research (PubMed:16054029), playing a critical role in cellular processes dependent on microtubule assembly and function. This protein is conserved across species, with functional similarities to human homologs (UniProtKB:Q9BTW9), underscoring its relevance in studying cytoskeletal organization and related biological pathways.