Recombinant CBPC6 protein (His tag)

Catalog Number	531043
Synonyms	ATP/GTP-binding protein-like 4 homolog; CeAGBL4
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q09296
Gene ID	184043
Molecular Weight	Predictes a molecular mass of 54.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 55 kDa band.

Product Information

Sequence Region	1-459
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-459 aa (Q09296) 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 Cytosolic Carboxypeptidase 6 (CCPP-6) Fragment (1-459 aa) from Caenororhabditis elegans. This high-purity fragment encompasses the complete Peptidase M14 domain, offering researchers a precise tool to investigate tubulin deglutamylation and microtubule dynamics in neuronal regeneration and cellular function. Cytosolic carboxypeptidase 6 (CCPP-6), encoded by the ccp-6 gene in Caenorhabditis elegans, is a metallocarboxypeptidase that plays a critical role in regulating microtubule stability by removing polyglutamate side chains from tubulin. This enzymatic activity, known as deglutamylation, is essential for axon regrowth following injury and for maintaining microtubule dynamics in uterine muscle cells. Located in the cytoplasm, CCPP-6 influences sensory cilia function and cellular structure, with implications for neuronal repair and muscle physiology. The provided fragment (residues 1-459) includes the full Peptidase M14 domain, enabling focused studies on its catalytic mechanisms and functional contributions to microtubule-associated processes.