Recombinant CAPZA protein (His tag)

Catalog Number	535231
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	P34685
Gene ID	177497
Molecular Weight	Predictes a molecular mass of 33.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-282
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 1-282 aa (P34685) 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 F-actin-capping protein subunit alpha (fragment 1-282) from Caenorhabditis elegans, a stable and soluble protein fragment ideal for studying actin filament regulation and cytoskeletal dynamics in biochemical and structural research applications. F-actin-capping protein subunit alpha, encoded by the cap-1 gene in C. elegans, binds to the barbed ends of actin filaments in a calcium-independent manner, effectively blocking subunit exchange and regulating filament elongation without severing activity. This protein localizes to the cytoplasm and cytoskeleton, playing a crucial role in maintaining cytoskeletal integrity and controlling actin-based cellular processes. The provided fragment encompasses the full functional domain (residues 1-282), selected for its stability and solubility to facilitate experimental investigations into actin-capping mechanisms.