Recombinant CIN4 protein (His tag)

Catalog Number	534278
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	G5ECQ8
Gene ID	191525
Molecular Weight	Predictes a molecular mass of 11.02 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	735-812
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 735-812 aa (G5ECQ8) 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 DNA topoisomerase-like protein cin-4 (residues 735-812) from Caenorhabditis elegans is a high-quality 78-amino acid fragment engineered for stability and solubility, ideal for structural biology and functional studies of centromere regulation and mitotic chromosome dynamics. The full-length DNA topoisomerase-like protein cin-4, encoded by the cin-4 gene in Caenorhabditis elegans, plays a critical role in mitosis by facilitating the removal of cohesin from kinetochores on mitotic chromosomes and is essential for centromere resolution. This function ensures proper chromosome segregation during cell division, as supported by experimental evidence (ECO:0000269|PubMed:18202360). The protein's involvement in these key processes makes it a valuable target for research into cell cycle mechanisms and genomic stability.