Recombinant CPG2 protein (His tag)

Catalog Number	532662
Synonyms	Cytokinesis protein B0280.5
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	P41996
Gene ID	175991
Molecular Weight	Predictes a molecular mass of 14.58 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	403-524
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 403-524 aa (P41996) 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 Chondroitin proteoglycan-2 (cpg-2) fragment (403-524) from Caenorhabditis elegans. This 122-amino acid fragment contains the complete Chitin-binding type-2 domain, providing an essential tool for studying cytokinesis, meiotic chromosome segregation, and chitin-binding mechanisms in developmental biology research. Chondroitin proteoglycan-2 (encoded by cpg-2) is a crucial protein in Caenorhabditis elegans embryonic development. The full-length protein is required for polar body extrusion during cytokinesis and affects cortical granule size. It plays significant roles in meiotic chromosome segregation, osmotic barrier function, and cellular polarization. Importantly, the protein possesses chitin-binding capability, which is mediated by the Chitin-binding type-2 domain contained within this recombinant fragment. These functions have been validated through multiple studies as referenced in UniProt entry P41996.