Recombinant CDC27 protein (His tag)

Catalog Number	532876
Synonyms	Anaphase-promoting complex subunit 3; Metaphase-to-anaphase transition defect protein 1
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9N593
Gene ID	172145
Molecular Weight	Predictes a molecular mass of 40.80 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	450-788
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 450-788 aa (Q9N593) 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 Cell division cycle protein 27 homolog (mat-1) fragment (450-788) from Caenorhabditis elegans, designed for structural and biochemical studies. This stable, soluble fragment enables investigation of the anaphase-promoting complex's role in cell cycle regulation and neuronal function. The full-length Cell division cycle protein 27 homolog (mat-1) is a component of the anaphase-promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase essential for mitotic progression and G1 phase control. It functions by mediating ubiquitination and degradation of target proteins during key developmental processes. Research demonstrates its critical role in early embryogenesis, metaphase-to-anaphase transitions in meiosis and mitosis, embryonic anterior-posterior axis formation, and regulation of glr-1 receptor abundance in postmitotic neurons affecting locomotion. The protein localizes to the nucleus, consistent with its fundamental cell cycle functions.