Recombinant CDC23 protein (His tag)

Catalog Number	533331
Synonyms	Anaphase-promoting complex subunit 8; APC8; Metaphase-to-anaphase transition defect protein 3
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q19294
Gene ID	175205
Molecular Weight	Predictes a molecular mass of 58.78 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 62 kDa band.

Product Information

Sequence Region	141-629
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 141-629 aa (Q19294) 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 23 homolog (APC8) fragment (residues 141-629) from Caenorhabditis elegans, a stable and soluble unit ideal for investigating the anaphase-promoting complex's role in cell cycle regulation and neuronal function. The full-length Cell division cycle protein 23 homolog (mat-3 gene product) is a probable component of the anaphase-promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase essential for controlling mitosis and G1 phase progression by mediating ubiquitination and degradation of target proteins. It plays critical roles in early embryogenesis, metaphase-to-anaphase transitions in meiosis and mitosis of germ cells, and embryonic anterior-posterior axis formation. Beyond cell division, it regulates glr-1 receptor abundance in postmitotic neurons to influence locomotion and modulates GABA neurotransmitter release at neuromuscular junctions, highlighting its significance in developmental biology and neurobiology. The provided fragment (residues 141-629) was selected for its stability and solubility, enabling structural and biochemical studies of these multifaceted functions.