Recombinant CCND protein (His tag)

Catalog Number	532895
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9U2M5
Gene ID	174941
Molecular Weight	Predictes a molecular mass of 29.53 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	64-304
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 64-304 aa (Q9U2M5) 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 G1/S-specific cyclin-D (cyd-1) fragment (residues 64-304) from Caenorhabditis elegans, encompassing the essential Cyclin N-terminal domain. This high-purity protein is an ideal tool for investigating cell cycle regulation mechanisms in developmental biology research. G1/S-specific cyclin-D, encoded by the cyd-1 gene in C. elegans, plays critical roles in cell cycle progression and developmental regulation. In complex with cdk-4, it controls G1 phase progression during postembryonic development and regulates proliferation of coelomocyte lineage and intestinal cells during late embryogenesis. Additionally, the cyclin-D/cdk-4 complex is involved in sex determination during gonadogenesis by regulating asymmetric division of somatic gonadal precursor cells. The protein's functions span multiple developmental stages, making it a key regulator of cell proliferation and differentiation processes in C. elegans.