Recombinant CCDB1 protein (His tag)

Catalog Number	539620
Synonyms	Grap2 and cyclin-D-interacting protein; Human homolog of Maid
Species	Human
Expression System	E. coli
Accession	O95273
Molecular Weight	Predictes a molecular mass of 23.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	2-198
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 2-198 aa (O95273) 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	Introducing our high-quality recombinant Cyclin-D1-binding protein 1 (CCNDBP1) fragment (residues 2-198), a stable and soluble protein unit ideal for investigating cell cycle regulation mechanisms. This carefully selected fragment maintains key functional characteristics while offering superior experimental handling for structural and biochemical studies. Cyclin-D1-binding protein 1, also known as Grap2 and cyclin-D-interacting protein, functions as a negative regulator of cell cycle progression. The protein operates primarily through inhibition of the cyclin-D1/CDK4 complex, thereby preventing phosphorylation of RB1 and blocking E2F-dependent transcription, which is crucial for controlling cellular proliferation. CCNDBP1 localizes to both the cytoplasm and nucleus, allowing it to interact with key cell cycle components throughout the cell. This strategic localization supports its role in maintaining proper cell cycle control and preventing uncontrolled cell division.