Recombinant CDKA2 protein (His tag)

Catalog Number	537332
Synonyms	CDK2-associated protein 2; DOC-1-related protein; DOC-1R
Species	Human
Expression System	E. coli
Accession	O75956
Molecular Weight	Predictes a molecular mass of 9.69 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	54-126
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 54-126 aa (O75956) 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	This product is a recombinant protein fragment of human Cyclin-dependent kinase 2-associated protein 2 (CDK2AP2), spanning residues 54-126. It is designed for structural and biochemical studies, offering a stable and soluble unit ideal for investigating the protein's role in chromatin remodeling and cell cycle regulation. Cyclin-dependent kinase 2-associated protein 2 (CDK2AP2), also known as DOC-1-related protein, is a multifunctional protein involved in key cellular processes. It acts as a component of the histone deacetylase NuRD complex, contributing to chromatin remodeling, and inhibits G1/S phase cell cycle transition by repressing CDK2 expression and activation through interference with cyclin interactions. Additionally, it plays roles in embryonic stem cell self-renewal, survival during differentiation, and microtubule organization in oocytes. The protein localizes to both the cytoplasm and nucleus, with dynamic subcellular distribution during meiotic divisions. This fragment was selected to provide a stable, soluble region for detailed mechanistic studies.