Recombinant KCY protein (His tag)

Catalog Number	546903
Synonyms	Deoxycytidylate kinase; CK; dCMP kinase; Nucleoside-diphosphate kinase; Uridine monophosphate/cytidine monophosphate kinase; UMP/CMP kinase; UMP/CMPK
Species	Human
Expression System	E. coli
Accession	P30085
Molecular Weight	Predictes a molecular mass of 23.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	1-196
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 1-196 aa (P30085) 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 UMP-CMP kinase (CMPK1) fragment (residues 1-196) from Homo sapiens, a key enzyme in pyrimidine nucleotide biosynthesis and phosphorylation. This stable, soluble fragment is ideal for structural studies, enzymatic assays, and biochemical research. UMP-CMP kinase (CMPK1) catalyzes the ATP-dependent phosphorylation of pyrimidine nucleoside monophosphates, with a preference for UMP and CMP, and also exhibits broad nucleoside diphosphate kinase activity. It plays a crucial role in de novo pyrimidine nucleotide biosynthesis, supporting nucleic acid metabolism and cellular function. The protein is predominantly localized in the cytoplasm, with a minor nuclear presence, reflecting its involvement in nucleotide salvage and metabolic pathways across cellular compartments.