Recombinant CHKB protein (His tag)

Catalog Number	543914
Synonyms	Choline kinase beta; CK; CKB; Choline kinase-like protein; Ethanolamine kinase; EK; Ethanolamine kinase beta; EKB; choline/ethanolamine kinase beta; CKEKB
Species	Human
Expression System	E. coli
Accession	Q9Y259
Molecular Weight	Predictes a molecular mass of 42.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	44-395
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 44-395 aa (Q9Y259) 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 the recombinant Choline/Ethanolamine Kinase Beta (CKB/EKB) fragment (residues 44-395), a highly stable and soluble protein unit designed for advanced structural and biochemical studies. This fragment captures the essential catalytic activity of the enzyme, enabling researchers to investigate its critical role in phospholipid biosynthesis with enhanced experimental reliability. Choline/Ethanolamine Kinase Beta, encoded by the CHKB gene in Homo sapiens, plays a pivotal role in phospholipid metabolism by catalyzing the initial step in the biosynthesis of phosphatidylethanolamine and phosphatidylcholine. These phospholipids are fundamental components of cellular membranes and are involved in signaling pathways, membrane integrity, and cellular homeostasis. The enzyme's function is supported by its ability to phosphorylate both choline and ethanolamine, as evidenced by studies (PubMed:19915674, PubMed:21665002), highlighting its importance in maintaining lipid balance and potential implications in metabolic disorders.