Recombinant COAC protein (His tag)

Catalog Number	545650
Synonyms	PPC-DC; CoaC
Species	Human
Expression System	E. coli
Accession	Q96CD2
Molecular Weight	Predictes a molecular mass of 24.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	1-204
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 1-204 aa (Q96CD2) 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 Human Phosphopantothenoylcysteine decarboxylase (PPC-DC, CoaC) fragment (amino acids 1-204) is a high-purity protein designed for structural and biochemical studies. This fragment, derived from the PPCDC gene, represents a stable and soluble unit optimized for research on coenzyme A biosynthesis. Phosphopantothenoylcysteine decarboxylase (PPC-DC), encoded by the PPCDC gene in humans, catalyzes the decarboxylation of 4-phosphopantothenoylcysteine to form 4'-phosphopantotheine. This reaction is a critical step in the biosynthesis of coenzyme A, an essential cofactor involved in numerous metabolic pathways, including fatty acid synthesis and the citric acid cycle. The enzyme's function is supported by experimental evidence (PubMed:11923312, PubMed:15581364), highlighting its importance in cellular metabolism. The subcellular location is not specified in the provided data.