Recombinant COQ3 protein (His tag)

Catalog Number	548402
Synonyms	3-demethylubiquinol 3-O-methyltransferase; 3-demethylubiquinone 3-O-methyltransferase; Polyprenyldihydroxybenzoate methyltransferase
Species	Human
Expression System	E. coli
Accession	Q9NZJ6
Molecular Weight	Predictes a molecular mass of 19.80 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	90-254
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 90-254 aa (Q9NZJ6) 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 COQ3 Protein Fragment (aa 90-254) - A high-quality, stable fragment of Ubiquinone biosynthesis O-methyltransferase, mitochondrial, specifically designed for structural and biochemical studies of this essential enzyme in the ubiquinone biosynthesis pathway. Ubiquinone biosynthesis O-methyltransferase (COQ3) is a mitochondrial enzyme critical for coenzyme Q (ubiquinone) biosynthesis, performing two non-consecutive methylation steps in this essential pathway. The enzyme catalyzes both the O-methylation of 3,4-dihydroxy-5-(all-trans-decaprenyl)benzoic acid and the final step converting 3-demethylubiquinone to ubiquinone. Located in the mitochondrial inner membrane as a peripheral membrane protein on the matrix side, COQ3 plays a vital role in cellular energy production through its involvement in the electron transport chain. The selected fragment (amino acids 90-254) represents a stable, soluble unit optimized for research applications, enabling detailed investigation of this key metabolic enzyme without the challenges associated with full-length membrane protein expression.