Recombinant COX7S protein (His tag)

Catalog Number	551804
Synonyms	Cytochrome c oxidase subunit VIIa 3
Species	Human
Expression System	E. coli
Accession	O60397
Molecular Weight	Predictes a molecular mass of 10.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	24-106
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 24-106 aa (O60397) 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 high-quality recombinant protein fragment of human Putative Cytochrome c Oxidase Subunit 7A3 (COX7A2P2), corresponding to residues 24-106. This 83-amino acid fragment has been computationally selected for optimal stability and solubility, making it an ideal reagent for structural studies, antibody production, and functional assays related to mitochondrial oxidative phosphorylation. The full-length Putative Cytochrome c Oxidase Subunit 7A3 is encoded by the gene COX7A2P2 and is a component of the mitochondrial electron transport chain. As indicated by its subcellular location, it is localized to the mitochondrial inner membrane, where cytochrome c oxidase (Complex IV) catalyzes the final step in the respiratory chain—the reduction of molecular oxygen to water. This reaction is coupled to proton pumping across the inner membrane, essential for establishing the proton gradient that drives ATP synthesis. While a detailed functional summary for this specific subunit is not provided, subunits of Complex IV are critical for cellular energy production, and their study is relevant to understanding mitochondrial function, bioenergetics, and associated disorders.