Recombinant COX2 protein (His tag)

Catalog Number	534102
Synonyms	Cytochrome c oxidase polypeptide II
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	P24894
Gene ID	2565697
Molecular Weight	Predictes a molecular mass of 17.63 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	90-231
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 90-231 aa (P24894) 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 Cytochrome c oxidase subunit 2 (EC 7.1.1.9) fragment (residues 90-231) from Caenorhabditis elegans, offering a stable and soluble unit for structural and biochemical studies of mitochondrial electron transport chain mechanisms. Cytochrome c oxidase subunit 2 is a critical component of complex IV in the mitochondrial electron transport chain, driving oxidative phosphorylation by catalyzing the reduction of oxygen to water. This process involves electron transfer via its dinuclear copper A center and heme A, contributing to the electrochemical gradient essential for ATP production. The full-length protein is localized to the inner mitochondrial membrane as a multi-pass membrane protein, where it facilitates efficient energy conversion in cellular respiration.