Recombinant UCRI protein (His tag)

Catalog Number	534652
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VQ29
Gene ID	44390
Molecular Weight	Predictes a molecular mass of 17.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	86-230
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 86-230 aa (Q9VQ29) 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 recombinant protein is a fragment of the Cytochrome b-c1 complex subunit Rieske, mitochondrial (EC 7.1.1.8) from Drosophila melanogaster, encompassing residues 86-230. It includes the complete Rieske domain, making it an ideal tool for investigating electron transfer mechanisms and domain-specific functions in mitochondrial respiration and oxidative phosphorylation. The full-length Cytochrome b-c1 complex subunit Rieske is a critical component of the ubiquinol-cytochrome c oxidoreductase (complex III) in the mitochondrial electron transport chain. It plays an essential role in oxidative phosphorylation by catalyzing electron transfer from ubiquinol to cytochrome c, utilizing its [2Fe-2S] iron-sulfur cluster to cycle between conformational states during the Q cycle. This process links redox reactions to proton translocation across the mitochondrial inner membrane, contributing to the electrochemical gradient that drives ATP synthesis. The protein is localized to the mitochondrial inner membrane as a single-pass membrane protein, underscoring its integral role in cellular energy production.