Recombinant NDUS2 protein (His tag)

Catalog Number	533972
Synonyms	Complex I-49kD; CI-49kD; NADH-ubiquinone oxidoreductase 49 kDa subunit
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q93873
Gene ID	181646
Molecular Weight	Predictes a molecular mass of 48.79 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 52 kDa band.

Product Information

Sequence Region	68-482
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 68-482 aa (Q93873) 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 415-amino acid fragment (residues 68-482) of the Probable NADH dehydrogenase [ubiquinone] iron-sulfur protein 2 from Caenorhabditis elegans, representing a stable and soluble unit of the mitochondrial Complex I-49kD subunit. It is ideal for structural studies, biochemical assays, and functional investigations of electron transport chain mechanisms. The full-length protein is a core subunit of mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), essential for electron transfer from NADH to ubiquinone in the oxidative phosphorylation pathway. It localizes to the mitochondrial inner membrane as a peripheral membrane protein on the matrix side, forming part of the minimal catalytic assembly required for Complex I activity. This subunit plays a critical role in cellular energy production and is conserved across species, with functional insights derived from studies in model organisms like C. elegans.