Recombinant NDUA2 protein (His tag)

Catalog Number	539489
Synonyms	Complex I-B8; CI-B8; NADH-ubiquinone oxidoreductase B8 subunit
Species	Human
Expression System	E. coli
Accession	O43678
Molecular Weight	Predictes a molecular mass of 12.44 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	2-99
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 2-99 aa (O43678) 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 NDUFA2 (NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 2) Fragment (residues 2-99) is a stable, soluble protein unit designed for structural and biochemical studies of mitochondrial Complex I, enabling research into electron transport mechanisms. NDUFA2 is an accessory subunit of mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), which facilitates electron transfer from NADH to ubiquinone in the respiratory chain. While not directly involved in catalysis, it contributes to Complex I's structural integrity and function. The protein localizes to the mitochondrial inner membrane as a peripheral membrane protein on the matrix side, playing a role in cellular energy production. This fragment (residues 2-99) represents a computationally optimized region for experimental applications, supporting investigations into mitochondrial respiration and oxidative phosphorylation pathways.