Recombinant NU5M protein (His tag)

Catalog Number	537419
Synonyms	NADH dehydrogenase subunit 5
Species	Human
Expression System	E. coli
Accession	P03915
Molecular Weight	Predictes a molecular mass of 10.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	503-581
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 503-581 aa (P03915) 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 NADH-ubiquinone oxidoreductase chain 5 (MT-ND5) fragment (residues 503-581), a stable and soluble unit ideal for structural and functional studies of mitochondrial complex I. NADH-ubiquinone oxidoreductase chain 5 is a core subunit of mitochondrial respiratory chain complex I (EC 7.1.1.2), which catalyzes electron transfer from NADH to ubiquinone, driving oxidative phosphorylation. This multi-pass membrane protein localizes to the mitochondrial inner membrane and is essential for both catalytic activity and assembly of complex I, playing a critical role in cellular energy production. The selected fragment represents a structurally stable region optimized for biochemical and structural analysis.