Recombinant NDUS7 protein (His tag)

Catalog Number	546531
Synonyms	Complex I-20kD; CI-20kD; NADH-ubiquinone oxidoreductase 20 kDa subunit; PSST subunit
Species	Human
Expression System	E. coli
Accession	O75251
Molecular Weight	Predictes a molecular mass of 19.70 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	56-213
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 56-213 aa (O75251) 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 product is a recombinant fragment of the human NADH dehydrogenase [ubiquinone] iron-sulfur protein 7 (NDUFS7), a core subunit of mitochondrial Complex I. The fragment (residues 56-213) is engineered for stability and solubility, making it ideal for structural studies and biochemical assays related to oxidative phosphorylation. The full-length NDUFS7 protein is a core subunit of mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), which catalyzes electron transfer from NADH to ubiquinone in the electron transport chain. It is essential for the catalytic activity of Complex I, playing a critical role in cellular energy production through oxidative phosphorylation. The protein is localized to the mitochondrial inner membrane, specifically as a peripheral membrane protein on the matrix side, underscoring its importance in mitochondrial function and metabolic pathways.