Recombinant NDUS4 protein (His tag)

Catalog Number	537213
Synonyms	Complex I-18 kDa; CI-18 kDa; Complex I-AQDQ; CI-AQDQ; NADH-ubiquinone oxidoreductase 18 kDa subunit
Species	Human
Expression System	E. coli
Accession	O43181
Molecular Weight	Predictes a molecular mass of 16.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	51-175
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 51-175 aa (O43181) 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 NDUFS4 Protein Fragment (51-175) - A highly stable and soluble fragment of the NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial, specifically designed for structural and biochemical studies of Complex I function in mitochondrial respiration. The full-length NDUFS4 protein serves as an accessory subunit of mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), which plays a crucial role in electron transfer from NADH to the respiratory chain with ubiquinone as the immediate electron acceptor. While not directly involved in catalysis, this protein is essential for proper Complex I function. Located in the mitochondrial inner membrane as a peripheral membrane protein on the matrix side, NDUFS4's interaction with BCAP31 mediates its mitochondrial localization, highlighting its importance in cellular energy production and mitochondrial organization.