PRODUCT INFORMATION

Expression system E.coli

Domain 1-116aa

UniProt No. Q16718

NCBI Accession No. NP_004991

Alternative Names

NADH:ubiquinone oxidoreductase subunit A5, NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5, Complex I subunit B13, Complex I-13kD-B, CI-13kD-B, NADH-ubiquinone oxidoreductase 13 kDa-B subunit, Complex I 13kDa subunit B, Ubiquinone reductase, Type I dehydrogenase, B13, NUFM, UQOR13, CI-13kB

PRODUCT SPECIFICATION

Molecular Weight

15.8 kDa (139aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5, also known as NDuFA5, belongs to the complex I NDuFA5 subunit family. The human NDuFA5 gene codes for the B13 subunit of complex I of the respiratory chain, which transfers electrons from NADH to ubiquinone. The high degree of conservation of NDuFA5 extending to plants and fungi indicates its functional significance in the enzyme complex. The protein



localizes to the inner mitochondrial membrane as part of the 7 component-containing, water soluble 'iron-sulfur protein' (IP) fraction of complex I, although its specific role is unknown. It is assumed to undergo posttranslational removal of the initiator methionine and N-acetylation of the next amino acid. Recombinant human NDuFA5 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques

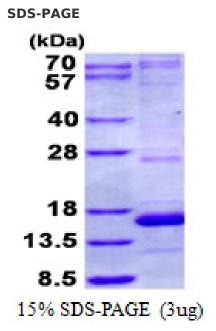
Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMAGVLKK TTGLVGLAVC NTPHERLRIL YTKILDVLEE IPKNAAYRKY TEQITNEKLA MVKAEPDVKK LEDQLQGGQL EEVILQAEHE LNLARKMREW KLWEPLVEEP PADQWKWPI

General References

Murray J., et al. (2003) J. Biol. Chem. 278:13619-13622 Choudhary C., et al. (2009) Science. 325:834-840

DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.