PRODUCT INFORMATION

Expression system E.coli

Domain 77-463aa

UniProt No. 075306

NCBI Accession No. NP_004541

Alternative Names

NADH:ubiquinone oxidoreductase core subunit S2, NADH dehydrogenase [ubiquinone] iron-sulfur protein 2 mitochondrial, NADH dehydrogenase (ubiquinone) Fe-S protein 2, NADH-coenzyme Q reductase, Complex I-49kD, CI-49kD, NADH-ubiquinone oxidoreductase 49 kDa subunit, complex I 49kDa subunit, CI-49

PRODUCT SPECIFICATION

Molecular Weight

46.5 kDa (410aa)

Concentration 0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 80% by SDS-PAGE

Tag

His-Tag

Application SDS-PAGE, Denatured

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] iron-sulfur protein 2, mitochondrial isoform 1 precursor, also known as NDUFS2, is a 463 amino acid protein that is suggested to be required for catalytic activity. Defects in NDuFS2 are the cause of complex I mitochondrial respiratory chain deficiency, which is characterized by a variety of symptoms including liver failure, cardiomyopathy and neurodegeneration. Located in the mitochondrial inner



membrane, mitochondrial complex I is the first and largest enzyme in the electron transport chain of oxidative phosphorylation. Recombinant human NDUFS2 protein, fused to His-tag at N-terminus, was expressed in E. coli.

Amino acid Sequence

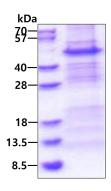
<MGSSHHHHHH SSGLVPRGSH MGS>VKNITLN FGPQHPAAHG VLRLVMELSG EMVRKCDPHI GLLHRGTEKL IEYKTYLQAL PYFDRLDYVS MMCNEQAYSL AVEKLLNIRP PPRAQWIRVL FGEITRLLNH IMAVTTHALD LGAMTPFFWL FEEREKMFEF YERVSGARMH AAYIRPGGVH QDLPLGLMDD IYQFSKNFSL RLDELEELLT NNRIWRNRTI DIGVVTAEEA LNYGFSGVML RGSGIQWDLR KTQPYDVYDQ VEFDVPVGSR GDCYDRYLCR VEEMRQSLRI IAQCLNKMPP GEIKVDDAKV SPPKRAEMKT SMESLIHHFK LYTEGYQVPP GATYTAIEAP KGEFGVYLVS DGSSRPYRCK IKAPGFAHLA GLDKMSKGHM LADVVAIIGT QDIVFGEVDR

General References

Loeffen J., et al. (2001) Ann Neurol. 49:195-201. Procaccio V., et al. (1998) Genome. 9:482-484.

DATA

SDS-PAGE



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