

AR51283PU-S**Human NDUFS2 (77-463, His-tag) - Purified****Alternate names:**

CI-49kD, Complex I-49kD, NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, NADH-ubiquinone oxidoreductase 49 kDa subunit, mitochondrial

Quantity:

20 µg

Concentration:

0.25 mg/ml (determined by Bradford assay)

Background:

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.

Uniprot ID:[O75306](#)**NCBI:**[NP_004541](#)**GeneID:**[4720](#)**Species:**

Human

Source:

E. coli

Format:**State:** Liquid purified protein**Purity:** >80% by SDS - PAGE**Buffer System:** 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol**Description:**

Recombinant human NDUFS2 protein, fused to His-tag at N-terminus, was expressed in E.coli.

AA Sequence:

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MGSSHHHHHHH  SSGLVPRGSH  MGSVKNITLN  FGPQHAAHG  VLRLVMELSG  EMVRKCDPHI
GLLHRGTEKL  IEYKTYLQAL  PYFDRLDYVS  MMCNEQAYSL  AVEKLLNIRP  PPRAQWIRVL
FGEITRLLNH  IMAVTTHALD  LGAMTPFFWL  FEEREKMFEE  YERVSGARMH  AAYIRPGGVH
QDLPLGLMDD  IYQFSKNFSL  RLDELELLT  NNRIWRNRTI  DIGVVTAEAA  LNYGFSGVML
RSGSIQWDLR  KTQPYDVYDQ  VEFDVPVGSR  GDCYDRYLCR  VEEMRQSLRI  IAQCLNKMPP
GEIKVDDAKV  SPPKRAEMKT  SMESLIHHFK  LYTEGYQVPP  GATYTAIEAP  KGEFGVYLVV
DGSSRPYRCK  IKAPGFAHLA  GLDKMSKGHM  LADVVAIIGT  QDIVFGVEVDR
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Molecular weight: 46.5 kDa (410aa)**Storage:**

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

Loeffen J., et al. (2001) Ann Neurol. 49:195-201.

Procaccio V., et al. (1998) Genome. 9:482-484.

Pictures:

