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## Recombinant human NDUFA5 protein

Catalog Number: ATGP1762

## **PRODUCT INFORMATION**

### **Expression system**

E.coli

#### **Domain**

1-116aa

#### **UniProt No.**

016718

#### **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



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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 post-translational 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**

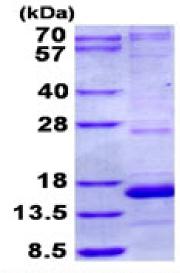
MGSSHHHHHH SSGLVPRGSH MGSMAGVLKK TTGLVGLAVC NTPHERLRIL YTKILDVLEE IPKNAAYRKY TEQITNEKLA MVKAEPDVKK LEDOLOGGOL EEVILOAEHE LNLARKMREW KLWEPLVEEP PADOWKWPI

#### **General References**

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

#### **DATA**

### **SDS-PAGE**



15% SDS-PAGE (3ug)

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

