

Product Information

MemDX™ Membrane Protein Human NDUFA1 (NADH:ubiquinone oxidoreductase subunit A1, 1-70 aa) for Antibody Discovery

Cat. No.: **MP0758X**

This product is for research use only and is not intended for diagnostic use.

This product is a 33.44 kDa Human NDUFA1 membrane protein expressed in *in vitro* wheat germ expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

NDUFA1

Protein Length

Full-length

Molecular Weight

33.44 kDa

TMD

1

Sequence

MWFEILPGLSVMGVCLIPGLATAYIHRFTNGGKEKRVAFHFGYHWSLMERDRRISGVDRYYVSKGLENID

Product Description

Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

Expression Systems

in vitro wheat germ expression system

Tag

GST-tag at N-terminal

Form

Liquid

Purification

Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer

Storage

Store at +4°C for up to one week or several months at -80°C

Target**Target Protein**

NDUFA1

Full Name

NADH:ubiquinone oxidoreductase subunit A1

Introduction

The human NDUFA1 gene codes for an essential component of complex I of the respiratory chain, which transfers electrons from NADH to ubiquinone. It has been noted that the N-terminal hydrophobic domain has the potential to be folded into an alpha-helix spanning the inner mitochondrial membrane with a C-terminal hydrophilic domain interacting with globular subunits of complex I. The highly conserved two-domain structure suggests that this feature is critical for the protein function and might act as an anchor for the NADH:ubiquinone oxidoreductase complex at the inner mitochondrial membrane. However, the NDUFA1 peptide is one of about 31 components of the "hydrophobic protein" (HP) fraction of complex I which is involved in proton translocation. Thus the NDUFA1 peptide may also participate in that function.

Alternative Names

MWFE; ZNF183; CI-MWFE; MC1DN12; NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 1; NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1, 7.5kDa; NADH-ubiquinone oxidoreductase MWFE subunit; NADH:ubiquinone oxidoreductase (complex 1); complex I MWFE subunit; type I dehydrogenase; Complex I-MWFE; CI-MWFE; NADH-ubiquinone oxidoreductase MWFE subunit

Gene ID

[4694](#)

UniProt ID

[O15239](#)