

# Product Information

## MemDX™ Membrane Protein Human ATP5F1A (ATP synthase F1 subunit alpha) Full Length

Cat. No.: **MPC1445K**

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

This product is a 59.7 kDa Human ATP5F1A membrane protein expressed in HEK293. 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

ATP5F1A

#### Protein Length

Full length

#### Protein Class

Transporter

#### Molecular Weight

59.7 kDa

#### Sequence

MLSVRVAAAVVRALPRRAGLVSRNALGSSFIAARNFHASNTHLQKTGTAE  
MSSILEERILGADTSVDLEETGRVLSIGDGIARVHGLRNVQAEEMVEFSS  
GLKGMSLNLEPDNVGVVVFVGNCKLIKEGDIVKRTGAIVDVPVGEELLGRV  
VDALGNAIDGKGPIGSKTRRRVGLKAPGIIPRISVREPMQTGIKAVDSL  
PIGRGQRELIIGDRQTGKTSIAIDTIINQKRFNDGSDEKKLYCIYVAIG  
QKRSTVAQLVKRLTDADAMKYTIVVSATASDAAPLQYLAPYSGCSMGEYF  
RDNGKHALIYDDLSKQAVAYRQMSLLLRPPGREAYPGDVLYLHSRLLE  
RAAKMNDAFGGGSLTALPVIETQAGDVSAYIPTNVISITDGQIFLET  
YKGIRPAINVGLSVSRVGSAAQTRAMKQVAGTMKLELAQYREVAFAQFG  
SDLDAATQQLSRGVRLTELLKQGGYSPMAIEEQVAVIYAGVRGYLDKLE  
PSKITKFENAFLSHVVSQHQALLGTIRADGKISEQSDAKLKEIVTNFLAG  
FEA

### Product Description

#### Expression Systems

HEK293

#### Tag

Based on specific requirements

**Protein Format**

Detergent or based on specific requirements

**Form**

Liquid

**Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

**Target****Target Protein**

ATP5F1A

**Full Name**

ATP synthase F1 subunit alpha

**Introduction**

This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, using an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel consists of three main subunits (a, b, c). This gene encodes the alpha subunit of the catalytic core. Alternatively spliced transcript variants encoding the different isoforms have been identified. Pseudogenes of this gene are located on chromosomes 9, 2, and 16.

**Alternative Names**

ATP5F1A; OMR; ORM; ATPM; MOM2; ATP5A; hATP1; ATP5A1; MC5DN4; ATP5AL2; COXPD22; HEL-S-123m; ATP synthase subunit alpha, mitochondrial; ATP synthase alpha chain, mitochondrial; ATP synthase, H<sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle; ATP synthase (F1-ATPase) alpha subunit; epididymis secretory sperm binding protein Li 123m; mitochondrial ATP synthetase, oligomycin-resistant; ATP synthase F1 subunit alpha

**Gene ID**

[498](#)

**UniProt ID**

[P25705](#)