

# Product Information

## MemDX™ Membrane Protein Human ATP5A1 (ATP synthase F1 subunit alpha) for Antibody

### Discovery

Cat. No.: **MP0081X**

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

This product is a 86.2 kDa Human ATP5A1 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

ATP5A1

#### Protein Length

Full-length

#### Molecular Weight

86.2 kDa

#### Sequence

MLSVRVAAAVVRALPRRAGLVSRNALGSSFIAARNFHASNTHLQKTGTAEMSSILEERILGADTSVDLEETGRVLSIGDGIARVHGLR

### 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

Glutathione Sepharose 4 Fast Flow

#### 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

ATP5A1

#### 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, F<sub>1</sub>, and the membrane-spanning component, F<sub>o</sub>, 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

ATP5A; ATP5AL2; ATPM; MOM2; OMR; ORM; hATP1; ATP synthase alpha chain, mitochondrial; ATP synthase, H<sup>+</sup> transporting, mitochondrial F<sub>1</sub> complex, alpha subunit; ATP synthase, H<sup>+</sup> transporting, mitochondrial F<sub>1</sub> complex, alpha subunit, isoform 1, cardiac muscle; ATP synthase, H<sup>+</sup> transporting, mitochondrial F

#### Gene ID

[498](#)

#### UniProt ID

[Q00189](#)