

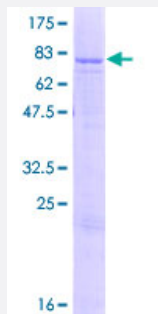
Full-Length

ATP5A1 (Human) Recombinant Protein (P01)

Catalog # H00000498-P01

Size 10 ug, 25 ug

Applications



Specification

Product Description

Human ATP5A1 full-length ORF (NP_001001937.1, 1 a.a. - 553 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MLSVRVAAAVVRALPRRAGLVSRNALGSSFIAARNFHASNTHLQKTGTAEMSSILEERILGADTSV
DLEETGRVLSIGDGIARVHGLRNVQAEEMVEFSSGLKGMSLNLEPDNVGVVVFVFGNDKLIKEGDV
KRTGAIVDVPVGEELLGRVVDALGNAIDGKGPIGSKTRRRVGLKAPGIIPRISVREPMQTGIKAVDS
LVPIGRGQRELIIGDRQTGKTSIAIDTIINQKRFNDGSDEKKKLYCIYVAIGQKRSTVAQLVKRLTDADA
MKYTIVVSATASDAAPLQYLAPYSGCSMGEYFRDNGKHAIYDDLSKQAVAYRQMSLLLRPPGR
EAYPGDVFYLSRLLERAAMNDAFGGGSLTALPIETQAGDVSAIYPTNVISITDGGIFLETIFYK
GIRPAINVGLSVSRVGSAAQTRAMKQVAGTMKLELAQYREVAFAAQFGSDLDAATQQLSRGVR
LTELKQGQYSPMAIEEQVAVIYAGVRGYLDKLEPSKITKFENAFLSHVVSQHQALLGTIRADGKISE
QSDAKLKEMTNFLAGFEA

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

86.2

Interspecies Antigen Sequence

Mouse (98); Rat (97)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

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

Gene Info — ATP5A1

Entrez GeneID	498
GeneBank Accession#	NM_001001937.1
Protein Accession#	NP_001001937.1
Gene Name	ATP5A1
Gene Alias	ATP5A, ATP5AL2, ATPM, MOM2, OMR, ORM, hATP1
Gene Description	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle
Omim ID	164360
Gene Ontology	Hyperlink

Gene Summary

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, F_o, 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 same protein have been identified. Pseudogenes of this gene are located on chromosomes 9, 2, and 16. [provided by RefSeq]

Other Designations

ATP synthase alpha chain, mitochondrial|ATP synthase, H⁺ transporting, mitochondrial F₁ complex, alpha subunit|ATP synthase, H⁺ transporting, mitochondrial F₁ complex, alpha subunit, isoform 1, cardiac muscle|ATP synthase, H⁺ transporting, mitochondrial F

Pathway

- [Metabolic pathways](#)
- [Oxidative phosphorylation](#)

Disease

- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Prostatic Neoplasms](#)