

# **Product datasheet for PH314840**

#### OriGene Technologies, Inc.

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### ATP5A (ATP5A1) (NM 004046) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

ATP5A1 MS Standard C13 and N15-labeled recombinant protein (NP\_004037) **Description:** 

Species: Human **HEK293 Expression Host: Expression cDNA Clone** 

or AA Sequence:

RC214840

Predicted MW: 59.75 kDa

>RC214840 representing NM\_004046 **Protein Sequence:** 

Red=Cloning site Green=Tags(s)

MLSVRVAAAVVRALPRRAGLVSRNALGSSFIAARNFHASNTHLQKTGTAEMSSILEERILGADTSVDLEE TGRVLSIGDGIARVHGLRNVQAEEMVEFSSGLKGMSLNLEPDNVGVVVFGNDKLIKEGDIVKRTGAIVDV PVGEELLGRVVDALGNAIDGKGPIGSKTRRRVGLKAPGIIPRISVREPMQTGIKAVDSLVPIGRGQRELI IGDRQTGKTSIAIDTIINQKRFNDGSDEKKKLYCIYVAIGQKRSTVAQLVKRLTDADAMKYTIVVSATAS DAAPLQYLAPYSGCSMGEYFRDNGKHALIIYDDLSKQAVAYRQMSLLLRRPPGREAYPGDVFYLHSRLLE RAAKMNDAFGGGSLTALPVIETQAGDVSAYIPTNVISITDGQIFLETELFYKGIRPAINVGLSVSRVGSA AQTRAMKQVAGTMKLELAQYREVAAFAQFGSDLDAATQQLLSRGVRLTELLKQGQYSPMAIEEQVAVIYA GVRGYLDKLEPSKITKFENAFLSHVVSQHQALLGTIRADGKISEQSDAKLKEIVTNFLAGFEA

**SGPTRTRRL**EQKLISEEDLAANDILDYKDDDDK**V** 

C-Myc/DDK Tag:

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Labeling Method:** Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stable for 3 months from receipt of products under proper storage and handling conditions. Stability:

RefSeq: NP 004037

RefSeq Size: 1895 RefSeq ORF: 1659





#### ATP5A (ATP5A1) (NM\_004046) Human Mass Spec Standard - PH314840

Synonyms: ATP5A; ATP5A1; ATP5AL2; ATPM; COXPD22; hATP1; HEL-S-123m; MC5DN4; MOM2; OMR; ORM

Locus ID: 498

**UniProt ID:** <u>P25705</u>, <u>V9HW26</u>

Cytogenetics: 18q21.1

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 multisubunit 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.

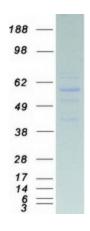
[provided by RefSeg, Mar 2012]

**Protein Families:** Druggable Genome

**Protein Pathways:** Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation,

Parkinson's disease

## **Product images:**



Coomassie blue staining of purified ATP5F1A protein (Cat# [TP314840]). The protein was produced from HEK293T cells transfected with ATP5F1A cDNA clone (Cat# [RC214840]) using MegaTran 2.0 (Cat# [TT210002]).