

Product datasheet for SC300525

OriGene Technologies, Inc.

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ATP5PF (NM_001003701) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: ATP5PF (NM_001003701) Human Untagged Clone

Tag: Tag Free
Symbol: ATP5PF

Synonyms: ATP5; ATP5A; ATP5J; ATPM; CF6; F6

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM_001003701, the custom clone sequence may differ by one or

more nucleotides

TTCAAATTTGAAGATCCCAAATTTGAAGTCATCGAAAAACCCCAGGCCTGA

Restriction Sites: Please inquire ACCN: NM 001003701

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).





Cytogenetics:

Reconstitution Method:

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: <u>NM 001003701.1</u>, <u>NP 001003701.1</u>

21q21.3

 RefSeq Size:
 1217 bp

 RefSeq ORF:
 351 bp

 Locus ID:
 522

 UniProt ID:
 P18859

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

Parkinson's disease

Gene Summary: Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of

protons across the inner membrane during oxidative phosphorylation. It is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, which comprises the proton channel. The F1 complex consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled in a ratio of 3 alpha, 3 beta, and a single representative of the other 3. The Fo complex has nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the F6 subunit of the Fo complex. The F6 subunit is required for F1 and Fo interactions. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. This gene has 1 or more pseudogenes. [provided by RefSeq, Feb

2016]

Transcript Variant: This variant (5) differs in the 5' UTR and the 5' coding region, compared to variant 1. The predicted isoform (b) is longer, and it contains a distinct N-terminus, compared

to isoform a. The translation initiation site for this transcript is inferred.