

Product datasheet for RG221163

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OriGene Technologies, Inc.

ATP5PF (NM 001003703) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ATP5PF (NM_001003703) Human Tagged ORF Clone

Tag: TurboGFP Symbol: ATP5PF

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

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG221163 representing NM_001003703
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGATTCTTCAGAGGCTCTTCAGGTTCTCCTCTGTCATTCGGTCAGCCGTCTCAGTCCATTTGCGGAGGA ACATTGGTGTTACAGCAGTGGCATTTAATAAGGAACTTGATCCTATACAGAAACTCTTTGTGGACAAGAT TAGAGAATACAAATCTAAGCGACAGACATCTGGAGGACCTGTTGATGCTAGTTCAGAGTATCAGCAAGAG CTGGAGAGGGAGCTTTTTAAGCTCAAGCAAATGTTTGGTAATGCAGACATGAATACATTTCCCACCTTCA

AATTTGAAGATCCCAAATTTGAAGTCATCGAAAAACCCCAGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221163 representing NM_001003703

Red=Cloning site Green=Tags(s)

MILQRLFRFSSVIRSAVSVHLRRNIGVTAVAFNKELDPIQKLFVDKIREYKSKRQTSGGPVDASSEYQQE

LERELFKLKQMFGNADMNTFPTFKFEDPKFEVIEKPQA

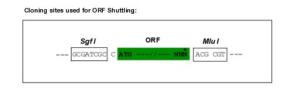
TRTRPLE - GFP Tag - V

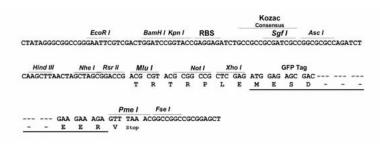
Restriction Sites: Sgfl-Mlul



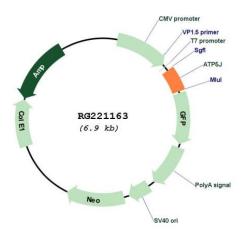


Cloning Scheme:





Plasmid Map:



ACCN: NM_001003703

ORF Size: 324 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info



ATP5PF (NM_001003703) Human Tagged ORF Clone - RG221163

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

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).

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 001003703.1</u>, <u>NP 001003703.1</u>

21q21.3

 RefSeq Size:
 1303 bp

 RefSeq ORF:
 327 bp

 Locus ID:
 522

 UniProt ID:
 P18859

Cytogenetics:

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 F0 complex has nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the F6 subunit of the F0 complex. The F6 subunit is required for F1 and F0 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]