

# Product datasheet for RG220958

### ATP5PF (NM\_001003697) Human Tagged ORF Clone

### **Product data:**

#### OriGene Technologies, Inc.

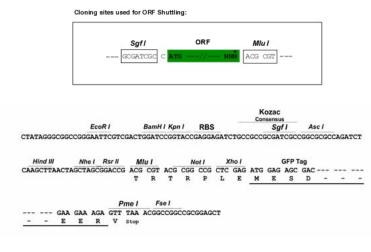
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| Product Type:                | Expression Plasmids  |
|------------------------------|--|
| Product Name:                | ATP5PF (NM_001003697) Human Tagged ORF Clone   |
| Tag:                         | TurboGFP   |
| Symbol:                      | ATP5PF   |
| Synonyms:                    | ATP5; ATP5A; ATP5J; ATPM; CF6; F6  |
| Mammalian Cell<br>Selection: | Neomycin   |
| Vector:                      | pCMV6-AC-GFP (PS100010)  |
| E. coli Selection:           | Ampicillin (100 ug/mL)   |
| ORF Nucleotide<br>Sequence:  | <pre>&gt;RG220958 representing NM_001003697 Red=Cloning site Blue=ORF Green=Tags(s)</pre>  |
|                              | TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC<br>GCC <mark>GCGATCGC</mark> C  |
|                              | ATGATTCTTCAGAGGCTCTTCAGGTTCTCCTCTGTCATTCGGTCAGCCGTCTCAGTCCATTTGCGGAGGA<br>ACATTGGTGTTACAGCAGTGGCATTTAATAAGGAACTTGATCCTATACAGAAACTCTTTGTGGACAAGAT<br>TAGAGAATACAAATCTAAGCGACAGACATCTGGAGGACCTGTTGATGCTAGTTCAGAGTATCAGCAAGAG<br>CTGGAGAGGGAGCTTTTTAAGCTCAAGCAAATGTTTGGTAATGCAGACATGAATACATTTCCCACCTTCA<br>AATTTGAAGATCCCAAATTTGAAGTCATCGAAAAACCCCAGGCC |
|                              | ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA   |
| Protein Sequence:            | <pre>&gt;RG220958 representing NM_001003697 Red=Cloning site Green=Tags(s)</pre>   |
|                              | MILQRLFRFSSVIRSAVSVHLRRNIGVTAVAFNKELDPIQKLFVDKIREYKSKRQTSGGPVDASSEYQQE<br>LERELFKLKQMFGNADMNTFPTFKFEDPKFEVIEKPQA   |
|                              | TRTRPLE - GFP Tag - V  |
| Restriction Sites:           | Sgfi-Mlul  |

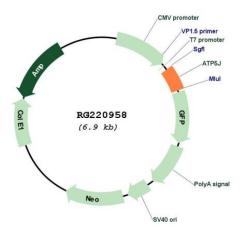


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#### **Cloning Scheme:**



Plasmid Map:



## ACCN: ORF Size: OTI Disclaimer:

NM\_001003697

#### 324 bp

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. <u>More info</u>

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|                        | F (NM_001003697) Human Tagged ORF Clone – RG220958   |
|------------------------|--|
| 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: | <ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>   |
| RefSeq:                | <u>NM 001003697.1, NP 001003697.1</u>  |
| RefSeq Size:           | 669 bp   |
| RefSeq ORF:            | 327 bp   |
| Locus ID:              | 522  |
| UniProt ID:            | <u>P18859</u>  |
| Cytogenetics:          | 21q21.3  |
| Protein Pathways:      | Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation,<br>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] |

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