

Product datasheet for RG219828

ATP5MF (NM 001003714) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ATP5MF (NM_001003714) Human Tagged ORF Clone

Tag: TurboGFP Symbol: ATP5MF

Synonyms: ATP5J2; ATP5JL

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

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

ORF Nucleotide >RG219828 representing NM_001003714
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCGTCAGTTGGTGAGTGTCCGGCCCCAGTACCAGTGAAGGACAAGAAACTTCTGGAGGTCAAACTGGGGGAGCTGCCAAGCTGGATCTTGATGCGGGACTTCAGTCCTAGTGGCATTTTCGGAGCGTTTCAAAGAGA

GCACGAGCGGCTCCGCAAATACCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG219828 representing NM_001003714

Red=Cloning site Green=Tags(s)

MASVGECPAPVPVKDKKLLEVKLGELPSWILMRDFSPSGIFGAFQREHERLRKYH

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul



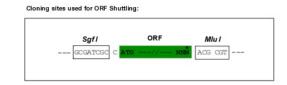
OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

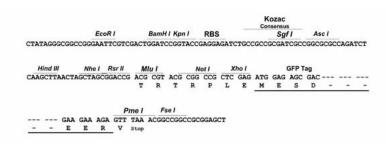
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

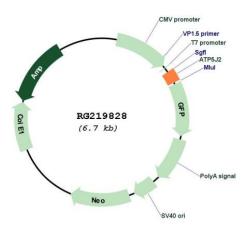


Cloning Scheme:





Plasmid Map:



ACCN: NM_001003714

ORF Size: 165 bp

ATP5MF (NM_001003714) Human Tagged ORF Clone - RG219828

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

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 001003714.3</u>

 RefSeq Size:
 411 bp

 RefSeq ORF:
 168 bp

 Locus ID:
 9551

 UniProt ID:
 P56134

Cytogenetics: 7q22.1

Protein Families: Transmembrane

Protein Pathways: Metabolic pathways, Oxidative phosphorylation

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 catalytic portion of mitochondrial ATP synthase consists of five different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and single representatives of the gamma, delta, and epsilon subunits. The proton channel likely has nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the f subunit of the Fo complex. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. This gene has multiple pseudogenes. Naturally occurring read-through transcription also exists between this gene and the downstream pentatricopeptide repeat domain 1 (PTCD1) gene. [provided by RefSeq,

Nov 2010]