

## **Product datasheet for MC207235**

## Atp5c1 (NM\_001112738) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Atp5c1 (NM\_001112738) Mouse Untagged Clone

Tag: Tag Free Symbol: Atp5c1

Synonyms: 1700094F02Rik

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC207235 representing NM\_001112738

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCAACTCTGAAAGATATTACCAGGAGACTGAAGTCCATCAAAAACATCCAGAAAATTACCAAGTCTA
TGAAGATGGTGGCAGCTGCAAAGTATGCCCGGGCTGAGCGGAGCTGAAGCCTGCCCGAGTGTATGGGAC
AGGTTCTTTGGCTCTGTATGAGAAGGCTGATATTAAGGCACCTGAGGACAAGAAGAAGCACCTCATTATT
GGTGTGTCCTCAGATAGAGGGCTTTGTGGTGCTATTCACTCCTCAGTGGCTAAACAGATGAAGAATGAAG
TGGCTGCCCTCACAGCAGCTGGGAAAGAAGTTATGATTGTTGGAGTTGGTGAAAAAATCAAGGGCATACT
TTATAGGACTCATTCTGATCAGTTTTTTGGTGTCATTCAAAGATGTGGGACGGAAGCCTCCTACTTTTGGA
GATGCATCAGTCATTGCCCTTGAGTTGTTAAATTCTGGATATGAATTTGATGAAGGCTCTATCATTTTTA
ATCAGTTCAAGTCTGTTATCTCCTACAAGACAGAAGAAGAAGCCCATCTTCTCTCTGAATACCATTGCGAC
TGCTGAGACCATGAGCATCTATGATGACATTGATGCTGATGTGCTGCAGAATTACCAGGAGTACAATCTG
GCCAACCTCATCTACTACTCCCTGAAGGAGTCCACCACCAGTGAGCAGAGTGCCAGGATGACCGCCATGG
ACAACGCCAGCAAGAACGCTTCTGATATGATTGACAAATTGACCTTTCACTTTCAACCGCCACCCGCCAGGC
TGTCATCACAAAGGAGTTGATTGAAATCATCTCTCTGGGGCTGCTCTTGGATTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001112738

**Insert Size:** 825 bp



**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

## Atp5c1 (NM\_001112738) Mouse Untagged Clone - MC207235

**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).

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: NM 001112738.1, NP 001106209.1

RefSeq Size: 1815 bp RefSeq ORF: 825 bp Locus ID: 11949 Cytogenetics: 2 A1

**Gene Summary:** Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP

> from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two

structural domains, F(1) - containing the extramembraneous catalytic core, and F(0) containing the membrane proton channel, linked together by a central stalk and a peripheral

stalk. During catalysis, ATP synthesis in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Part of the complex F(1) domain and the central stalk which is part of the complex rotary element. The gamma subunit protrudes into the catalytic domain formed of alpha(3)beta(3). Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate

catalytic sites on the beta subunits.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR and coding region compared to variant

1. The resulting protein (isoform b) has a shorter N-terminus compared to isoform 1.