

## Product datasheet for MR204152

### Atp5c1 (NM\_001112738) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Atp5c1 (NM_001112738) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atp5c1
Synonyms:	1700094F02Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204152 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTCTCGGGGCGAGCGTTGTCGGGCTGTCGGCCTGCGCCGTGCAGCCGCAATGGATCCAAGTTCGAA  
ACATGGCAACTCTGAAAGATATTACCAGGAGACTGAAGTCCATCAAAAACATCCAGAAAATTACCAAGTC  
TATGAAGATGGTGGCAGCTGCAAAGTATGCCCGGGCTGAGCGGGAGCTGAAGCCTGCCGAGTGTATGGG  
ACAGGTTCTTTGGCTCTGTATGAGAAGGCTGATATTAAGGCACCTGAGGACAAGAAGAAGCACCTCATT  
TTGGTGTGTCCTCAGATAGAGGGCTTTTGGTGTCTATTACTCCTCAGTGGCTAAACAGATGAAGAATGA  
AGTGGCTGCCCTCACAGCAGCTGGGAAAGAAGTTATGATTGTTGGAGTTGGTGAAAAAATCAAGGGCATA  
CTTTATAGGACTCATTCTGATCAGTTTTTGGTGTCTATTCAAAGATGTGGGACGGAAGCCTCTACTTTTG  
GAGATGCATCAGTCATTGCCCTTGAGTTGTTAAATTCTGGATATGAATTTGATGAAGGCTCTATCATTTT  
TAATCAGTTCAAGTCTGTTATCTCCTACAAGACAGAAGAGAAGCCCATCTTCTCTCTGAATACCATTGCG  
ACTGCTGAGACCATGAGCATCTATGATGACATTGATGCTGATGTGCTGCAGAATTACCAGGAGTACAATC  
TGGCCAACTCATCTACTACTCCCTGAAGGAGTCCACCACAGTGAGCAGAGTGCCAGGATGACCGCCAT  
GGACAACGCCAGCAAGAACGCTTCTGATATGATTGACAAATTGACCTTGACTTTCAACCCGACCCGCCAG  
GCTGTATCACAAGGAGTTGATTGAAATCATCTCTGGGGCTGCTGCTCTGGAT

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >MR204152 protein sequence  
Red=Cloning site Green=Tags(s)

MFSRASVVGLSACAVQPQWIQVRNMATLKDITRRLKSIKNIQKITKSMKMVAAAKYARAERELKPARVYG  
 TGSLALYEKADIKAPEDKKKHLIIGVSSDRGLCGAIHSSVAKQMKNEVAALTAAGKEVMI VGVGEKIKGI  
 LYRTHSDQFLVSFKDVGKRPPTFGDASVIALELLNSGYEFDEGSIIFNQFKSVISYKTEEKPIFSLNTIA  
 TAETMSIYDDIDADVLQNYQEYNLANLIYYSLKESTTSEQSARMTAMDASKNASDMIDKLTTLTFNRTRQ  
 AVITKELIEIISGAAALD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001112738

**ORF Size:** 897 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](#)

**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 Size:** 1815 bp

**RefSeq ORF:** 825 bp

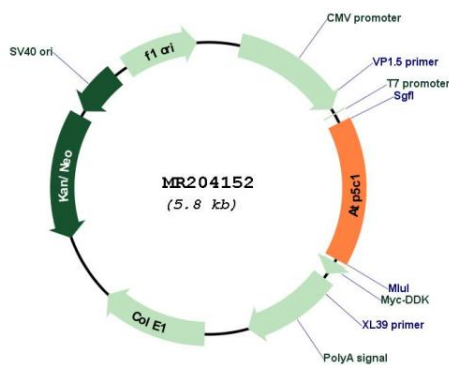
**Locus ID:** 11949

**Cytogenetics:** 2 A1

**MW:** 32.9 kDa

**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]

### Product images:



Circular map for MR204152