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Product datasheet for MG203291

Atp5f1 (BC087882) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp5f1 (BC087882) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Atp5f1
Synonyms:	C76477
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG203291 representing BC087882
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGTCCCGGGTGGTGCTTTCTGCTGCCGCCACAGCGGCCCCGTGTCTGAAGAACGCGGCCGCCCTAG
GTCCAGGGGTATTACAGGCAACAAGGGCCTTTCACACAGGACAGCCTCGCCTTGCCCCTCTACCACCTCT
TCCTGAATATGGAGGAAAAGTGCGTCTTGGGCTGATTCCTGAGGAATTTTTCCAGTTCCTTTACCCTAAG
ACTGGTGTAACAGGACCTTATGTGCTTGGAACTGGACTTAGCTTGTATTTTCTATCCAAAGAAATATATG
TGATTACCCCAGAGACCTTCTCTACCATATCAGTAGTAGGGTTGATAGTCTATGTGATTAAGAAATATGG
CGCCTCTTTTGGAGAATTTATTGACAAACTTAATGAGGAAAAAATTGCTCAACTAGAAGAAGTAAAGCAG
TCGAGCATGAAACAAATCCAGGATGCAATCGACATGGAGAAGGCACAGCAGGCACTGGTTCAGAAGCGCC
ATTACCTCTTCGATGTGCAGAGGAATAACATTGCCCTGGCCTTGGAGGTCACTTACCGGGAACGGCTACA
TAAAGCATATAAGGAGGTAAAGAATCGCCTGGACTACCACATCTCTGTACAGAACATGATGCGTCGCAAG
GAGGAAGAACACATGATAGACTGGGTAGAAAAGCATGTGGTGAAGAGCATTTCTGTACAGCAGGAAAAGG
AGACCATTGCCAAGTGCATTGAAGATCTAAAGCTGCTTGCAAAGAAGGCTCAAGCTCAGCCAATTATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

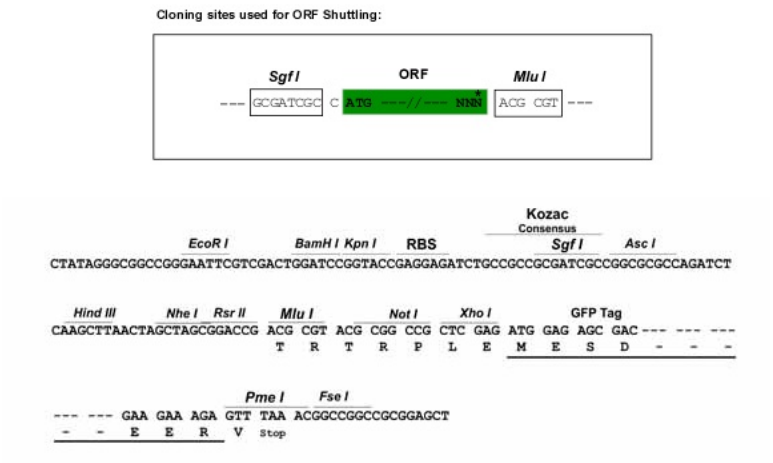
>MG203291 representing BC087882
Red=Cloning site Green=Tags(s)

MLSRVVLSAAATAAPCLKNAAALGPGVLQATRAFHTGQPRLAPLPPLPEYGGKVRLGLIPEEFFQFLYPK
TGVTGPYVLGTGLSLYFLSKEIYVITPETFSTISVVGLIVYVIKKYGASFGEFIDKLNEEKIAQLEEVKQ
SSMKQIQDAIDMEKAQQALVQKRHYLFDVQRNNIALALEVTYRERLHKAYKEVKNRLDYHISVQNMMRRK
EEEHMIDWVEKHVVKSISVQQEKETIAKCIEDLKLLAKKAQAQPIM

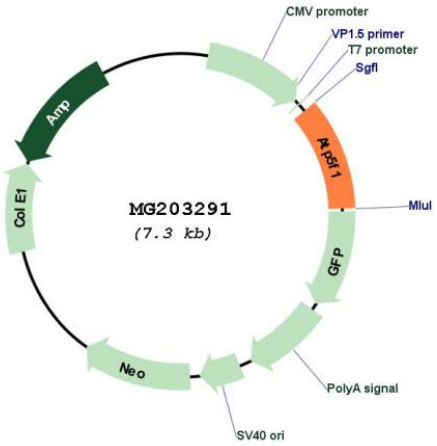
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: BC087882

ORF Size: 770 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:	BC087882, AAH87882
RefSeq Size:	1487 bp
RefSeq ORF:	770 bp
Locus ID:	11950
Cytogenetics:	3 46.46 cM
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(0) domain and the peripheric stalk, which acts as a stator to hold the catalytic alpha(3)beta(3) subcomplex and subunit a/ATP6 static relative to the rotary elements.[UniProtKB/Swiss-Prot Function]