

Product datasheet for **RC203316**

ATP5MD (NM_032747) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP5MD (NM_032747) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ATP5MD
Synonyms: bA792D24.4; DAPIT; HCVFTP2; MC5DN6; USMG5
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC203316 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGGTCCAGAAAGTGATGCGCAATACCAGTTCACTGGTATTAATAAATATTCAACTCTTATACTC
TCACAGGTAGAATGAACTGTGTACTGGCCACATATGGAAGCATTGCATTGATTGTCTTATATTTCAAGTT
AAGGTCCAAAAAACTCCAGCTGTGAAAGCAACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203316 protein sequence
Red=Cloning site Green=Tags(s)

MAGPESDAQYQFTGIKKYFNSYTLTGRMNCVLATYGSIALIVLYFKLRSKKTPAVKAT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6050_b06.zip

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_032747

ORF Size: 174 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_032747.4](#)

RefSeq Size: 609 bp

RefSeq ORF: 177 bp

Locus ID: 84833

UniProt ID: [Q96IX5](#)

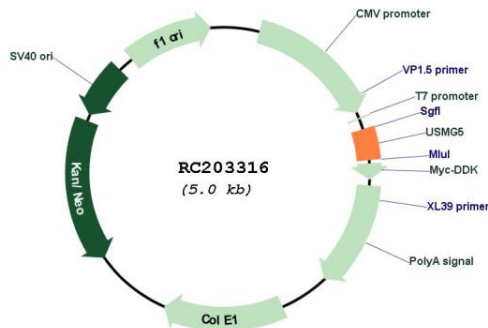
Cytogenetics: 10q24.33

Protein Families: Transmembrane

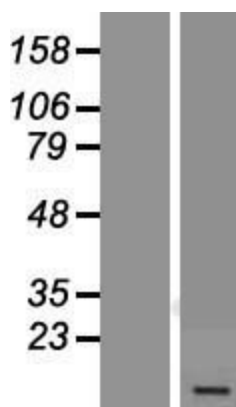
MW: 6.5 kDa

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 (Probable). Minor subunit required to maintain the ATP synthase population in the mitochondria (PubMed:21345788). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC203316



Western blot validation of overexpression lysate (Cat# [LY409957]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203316 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).