

Product datasheet for **RC215565**

ATP5ME (NM_007100) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP5ME (NM_007100) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ATP5ME
Synonyms: ATP5I; ATP5K
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC215565 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGCCACCGGTGCAGGTCTCTCCGCTCATCAAGCTCGGCCGCTACTCCGCCCTGTTCTCGGTGTGG
CCTACGGAGCCACGCGCTACAATTACCTAAAACCTCGGGCAGAAGAGGAGGAGGATAGCAGCAGAAGA
GAAGAAGAAGCAGGATGAACTGAAACGGATTGCCAGAGAATTGCCAGAAGATGACAGCATATTAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC215565 protein sequence
Red=Cloning site Green=Tags(s)
MVPPVQVSPLIKLGRYSALFLGVAYGATRYNYLKPRAEEERRIAAEEKKKQDELKRIARELAEDDSILK
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6453_a01.zip

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_007100

ORF Size: 207 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.

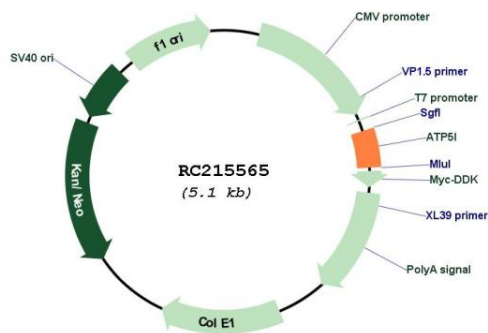
RefSeq: [NM_007100.4](#)

RefSeq Size: 373 bp

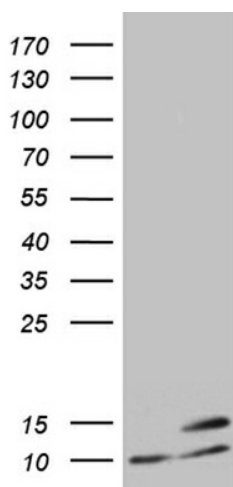
RefSeq ORF: 210 bp

Locus ID: 521
UniProt ID: [P56385](#)
Cytogenetics: 4p16.3
Protein Pathways: Metabolic pathways, Oxidative phosphorylation
MW: 7.9 kDa
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 F1 complex consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled in a ratio of 3 alpha, 3 beta, and a single representative of the other 3. The Fo seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the e subunit of the Fo complex. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Jun 2010]

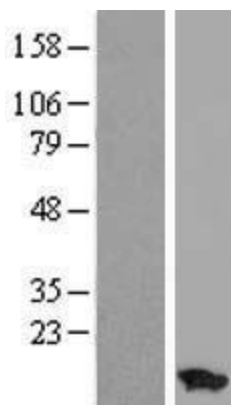
Product images:



Circular map for RC215565



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ATP5I (Cat# RC215565, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ATP5I (Cat# [TA811780])(1:2000). Positive lysates [LY416195] (100ug) and [LC416195] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416195]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215565 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).