

Product datasheet for RC211772

ATP4A (NM_000704) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP4A (NM_000704) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATP4A
Synonyms:	ATP6A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211772 representing NM_000704 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAAGGCCGAGAATATGAGCTCTACTCGGTGGAGCTGGGTCTGGCCCTGGCGGGACATGGCTG
CCAAGATGAGCAAGAAGAAGAAGCGGGTGGCGGGGTGGCAAGAGGAAGGAGAAGCTGGAGAACATGAA
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ACCAAGGGCCTCTCTGCGAGCCTGGCTGCTGAGCTGCTGCTGCGGGATGGGCCAACGCCTGCGGCCAC
CACGGGGCACCCAGAGTACGTCAAGTTTGCAGGCGAGCTGGCCGGGGCCTGCAGTGCCTCATGTGGGT
TGCCGCCGCCATCTGCCTCATCGCTTTGCCATCCAGGCTAGTGAGGGGGACCTCACACCAGCACAAT
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AGAGCACCAACATCATCGCCAGCTTTAAGAACCTTGTGCCACAGCAAGCCACTGTGCATCCGCGATGGAGA
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CACCATGTGCCTTGAGGGCACCGTGCAGGGCCTGGTGGTGAACACGGGCGACCCACCATCATTGGGCGC
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ATACCTTCAACTCCACCAACAAGTTCCAGCTGTCCATCCATACGCTGGAGGACCCGCGGACCCGCGAC
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AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>RC211772 representing NM_000704
 Red=Cloning site Green=Tags(s)

MGKAENYELYSVELGPGPGDMAAKMSKKKAGGGGKRKEKLENMKKEMEINDHQLSVAELEQKYQTS
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 LYLAIALIAVVVVVTCGFGYYQEFKSTNIIASFKNLVPQQATVIRDGDKFQINADQLVVGDLVEMKGGDRV
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 VTVCLSLTAKRLASKNCVVKNEAVETLGSTSVICSDKTGTLTQNRMTVSHLWFDNHIHTADTTEDQSGQ
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 HPITAKAIAASVGIISEGSETVEDIAARLRVPVDQVNRKDARACVINGMQLKMDPSELVEALRTHPEMV
 FARTSPQQLVIVESCQRLGAIVAVTGDGVNDSPALKKADIGVAMGIAGSDAAKNAADMILLDDNFASIV
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 DIMHLRPRNPKRDRLVNEPLAAYSFYQIGAIQSFAGFTDYFTAMAQEGWFPLLCVGLRAQWEDHHLQDLQ
 DSYGQEWTFGQRLYQYTCYTVFFISIEVCQIADVLIRKTRRLSAFQQGFFRNKILVIAIVFQVCIGCFL
 CYCPGMPNIFNFMPIRFQWWLVLPYIGILIFVYDEIRKLGVRCCPGSWWDQELYYSGP

SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2667_e02.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_000704

ORF Size: 3114 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_000704.2](#), [NP_000695.2](#)

RefSeq Size: 3582 bp

RefSeq ORF: 3108 bp

Locus ID: 495

UniProt ID: [P20648](#)

Cytogenetics: 19q13.12

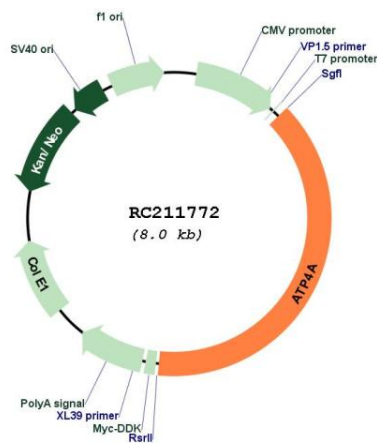
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Oxidative phosphorylation

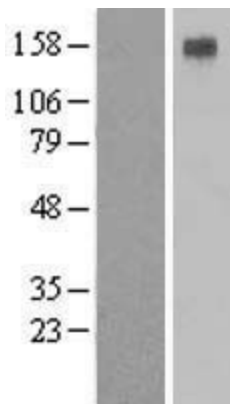
MW: 113.9 kDa

Gene Summary: The protein encoded by this gene belongs to a family of P-type cation-transporting ATPases. The gastric H⁺, K⁺-ATPase is a heterodimer consisting of a high molecular weight catalytic alpha subunit and a smaller but heavily glycosylated beta subunit. This enzyme is a proton pump that catalyzes the hydrolysis of ATP coupled with the exchange of H⁽⁺⁾ and K⁽⁺⁾ ions across the plasma membrane. It is also responsible for gastric acid secretion. This gene encodes a catalytic alpha subunit of the gastric H⁺, K⁺-ATPase. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC211772



Western blot validation of overexpression lysate (Cat# [LY424563]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211772 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).