

## Product datasheet for RR217427

### Atp4a (NM\_012509) Rat Tagged ORF Clone

#### Product data:

|                          |   |
|--------------------------|---|
| Product Type:            | Expression Plasmids   |
| Product Name:            | Atp4a (NM_012509) Rat Tagged ORF Clone                                      |
| Tag:                     | Myc-DDK   |
| Symbol:                  | Atp4a   |
| Synonyms:                | Hka; Hkatpc   |
| Vector:                  | pCMV6-Entry (PS100001)  |
| E. coli Selection:       | Kanamycin (25 ug/mL)  |
| Cell Selection:          | Neomycin  |
| ORF Nucleotide Sequence: | >RR217427 representing NM_012509<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGC**C

ATGGGGAAGGCAGAGAATTATGAATTGACTCAGTGGAACTGGGACTGGCCCTGGTGGGAACATGGCTG  
CCAAGATGAGCAAGAAGAAGGCGGGAGGCGGGGAGGCAAGAAGAAGGAGAAGCTAGAGAACATGAAGAA  
GGAGATGGAGATGAACGACCACCAGTTGTCTGAGCTGGAGCAGAAGTACCAGACCAGTCCACC  
AAGGGCCTGAAGGCGAGTCTGGCAGCTGAGCTGCTGCTGAGGGATGGGCCAATGCACTCCGGCCACCTC  
GGGGCACCCCTGAGTACGTGAAGTTCGCCCGGAGCTGGCAGGCGGTCTGCAGTGCCTCATGTGGGTGGC  
TGCAGCCATCTGCCTCATTGCCTTTGCGATTACAGGCCAGCGAGGGAGACCTGACCACTGATGACAATTTG  
TACCTGGCGTTGGCACTCATTGCTGTGGTTGTGGTCACTGGCTGTTTTGGCTACTACCAGGAGTTCAAGA  
GCACAAATATCATCGCCAGCTTCAAGAATCTTGTACCCCAAGCCACAGTATCCGAGACGGGATAA  
GTTCCAGATCAACGCGGATCAGCTTGTGGTGGGCGACCTGGTAGAGATGAAAGGCGGGGACCGCTCCCA  
GCAGACATCCGAATCTGTCTGAGCCAGGGCTGCAAGGTGGACAACCTCTCGCTTACTGGAGAGTCTGAAC  
CGCAGACCCGCTCACCTGAGTGTACACAGAGAGTCCCCTTGAGACCCGCAACATCGCCTCTTCTCCAC  
CATGTGTCTGGAGGGCACGGCGCAGGGCTTGGTGGTAGCACCGGTGATCGCACCATCATTGGACGCATC  
GCCTCTCTGGCTTCGGGTGTGGAAAACGAGAAGACTCCTATCGCGATCGAGATCGAACATTTTGTGGACA  
TCATTGCTGGCCTGGCCATCCTCTTGGTGGCCATTCTTGTGGTGGCCATGTGTATCGGCTATACCTT  
CCTTCGGGCCATGGTCTTCTTCAAGCCATTGTGGTAGCCTATGTGCCTGAGGGGCTGCTGGCTACTGTC  
ACGGTCTGCCTGTCACTGACAGCAAAGAGGCTGGCCAGTAAAACTGTGTGGTCAAAAATCTGGAAGCAG  
TGGAGACCCTGGTTCACGTCAGTCTGCTCAGACAAGACAGGAACCTTACTCAGAACCGCATGAC  
GGTGTCTCATCTATGGTTTGACAACCATATCCACACGGCGGACACCACAGAAGACCAGTCAAGGCAACG  
TTGACCAATCGTCGGAGACCTGGCGGGCGCTGTGCCGCTGCTCACCTGTGCAACCGCGCTGCCTTCA  
AGTCTGGCCAGGACGCCGTGCCAGTGCCCAAGCGCATCGTGATCGGAGACGCATCTGAGACTGCGCTGCT  
CAAGTTCTCGGAGTTGACGTTGGGCAACGCCATGGGTTATCGGGACCGCTTCCCAAAAGTTTGGCAGATC  
CCCTTCAACTCCACCAACAAGTTTCAGTGTCCATTCACTCTGGAGGATCCGCGCGACCCCGGCACT



View online »

TGCTGGTATGAAGGGCGCCCCAGAGCGGTGCTGGAGCGTTGCAGCTCCATCCTCATCAAGGGCCAGGA  
 GCTGCCCTGGACGAGCAATGGCGTGAGGCCTTCAGACAGCCTACCTTAGCCTGGGAGGCCTAGGCGAA  
 CGCGTTCTTGGTTTCTGCCAGCTCTACCTGAATGAGAAGGACTACCCGCTGGCTACACCTTTGATGTGG  
 AGGCCATGAACTTTCAAAGTAGTGGCTCTGCTTTGCGGGACTTGTATCCATGATTGACCTCCCCGGGC  
 CACCGTCCAGATGCTGTGCTCAAATGCCGTACGGCAGGCATCCGGGTGATCATGGTGACTGGTGACCAT  
 CCCATCACAGCCAAGGCCATTGCAGCCAGTGTGGGGATCATCTCGAAGGCAGCGAGACAGTGAAGACA  
 TCGCCGCCCGCTCCGAATGCCTGTAGACCAGTTAATAAGAAGGATGCCCGGCCTGTGTGATCAATGG  
 CATGCAGTTGAAGGACATGGACCATCTGAGCTGGTGGAGGCGCTGCGCACCCACCTGAGATGGTGTTT  
 GCTCGAACCAAGTCTCAGCAGAAGCTGGTGATTGTGGAGAGCTGTGAGCGACTGGGTGCCATTGTGGCTG  
 TAACAGGGGATGGTGTGAATGACTCCCCAGCCCTGAAGAAGGCTGACATTGGTGTAGCCATGGGCATTGC  
 TGGCTCCGATGCTGCTAAAAATGCTGCTGACATGATCTTGGTGGATGACAACTTCGTTCCATTGTGACG  
 GCGTGGAGCAGGGCCGACTGATCTTTGACAACCTGAAGAAATCCATCGCCTATACACTGACCAAGAACA  
 TTCCAGAACTGACACCCTACCTTATCTATATCACTGTCAGTGTGCCCTACCCCTTGGGTGTATCACCAT  
 TCTCTTATAGAAGTCTGCACAGATATCTTCCATCTGTGTCCCTGGCATATGAAAAGGCCGAGAGTGAC  
 ATCATGCACCTGCGCCACGGAACCCAGGCGGGACCGTTGGTCAATGAACCCCTGGCTGCTTATTCCT  
 ATTTTCAGATTGGTGCCATTGATCATTGCGCGCTTTGCTGACTACTTCACGGCCATGGCCAGGAGGG  
 CTGTTCCCTCTGCTGTGTGGGGCTGCGACCACAATGGGAGGACCACCATCTACAAGATCTTCAAGAC  
 AGCTACGGCCAGGAATGGACATTTGGTCAGCGTCTGTACCAGCAGTACACCTGTTACACCGTGTCTTCA  
 TCAGCATCGAGATGTGCCAGATCGCTGATGTCTCATCCGCAAGACACGCCGCTCTCCGCTTCCAGCA  
 GGGATTCTTCAGGAACAGGATCCTGGTGTGATCGCCATCGTGTTCAGGTCTGCATTGGCTGCTTCTGTGC  
 TACTGCCAGGGATGCCAACATCTTCAACTCATGCCATCCGGTCCAGTGGTGGCTGGTCCCCATGC  
 CCTTTGGCCTTCTCATCTTGTCTATGATGAGATCCGAAACTTGGAGTTCGCTGTTGCCAGGGAGCTG  
 GTGGGACCAGGAAGTCTACTAT

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTAA

**Protein Sequence:**

>RR217427 representing NM\_012509  
 Red=Cloning site Green=Tags(s)

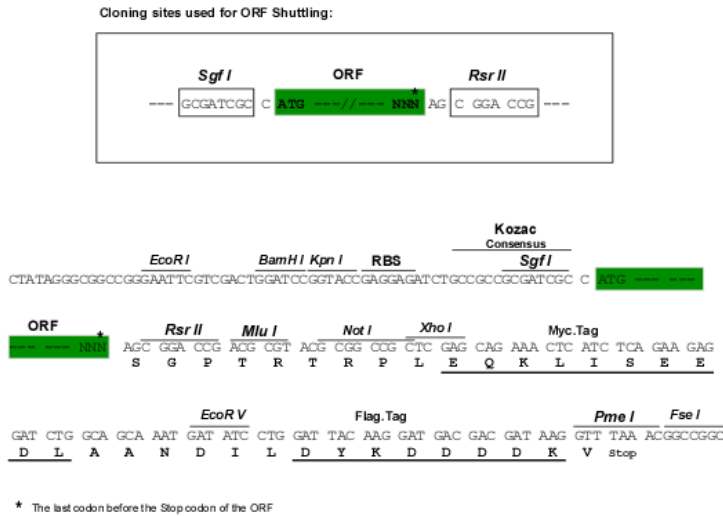
MGKAENYELYSVELGTGPGNMAAKMSKKKAGGGGKKKEKLENMKMEMMNDHQLSVSELEQKYQTSAT  
 KGLKASLAAELLLRDGPNALRPPRGTPPEYVKFARQLAGGLQCLMWVAAAICLIAFAIQASEGDLTTDDNL  
 YLALALIAVVVVTGCFGYQEFKSTNIIASFKNLVPQQATVIRDGDKFQINADQLVVGDLVEMKGGDRVP  
 ADIRILSAQGCKVDNSSLTGESEPTRSPECTHESPLETRNIAFFSTMCLGTAQGLVSTGDRTIIGRI  
 ASLASGVENEKTPIAIEIEHFVDIIAGLAILFGATFFVAMCIGYFLRAMVFFMAIVVAYVPEGLLATV  
 TVCLSLTAKRLASKNCVKNLEAVETLGSTSVICSDKTGTLTQNRMTVSHLWFDNHIHTADTTEDQSGQT  
 FDQSSETWRALCRVLTLCNRAAFKSGQDAVPVVKRIVIGDASETALLKFSELTLGNAMGYRDRFPKVCEI  
 PFNSTNKFQLSIHTLEDPRDPRHLLVMKGAPERVLERCSSILIKQELPLDEQWREAFQTAYLSLGGLE  
 RVLGFCQLYLNEKDYPGTYFDVEAMNFPSSGLCFAGLVSMIDPPRATVPDAVLKCRTAGIRVIMVTGDH  
 PITAKAIAASVGIISEGSETVEDIAARLRMPVDQVNNKDARACVINGMQLKDMDPSELVEALRTHPEMVF  
 ARTSPQQLVIVESCQRLGAIIVAVTGDGVNDSPALKKADIGVAMGIAGSDAAKNAADMILLDDNFASIVT  
 GVEQGRILFDNLKKSIAAYTLTKNIPELTPYLIIYITVSVPLPLGCITILFIELCTDIFPSVSLAYEKAESD  
 IMHLRPRNRRDRLVNEPLAAYSFYQIGAIQSFAGFADYFTAMAQEGWFPLLCVGLRPQWEDHHLQDLQD  
 SYGQEWTFGRQLYQYTCYTVFFISIEMCQIADVLIRKTRRLSAFQQGFFRNIRILVIAIVFQVCIGCFLC  
 YCPGMPNIFNFMPIRFQWWLVPMPFGLLIFVYDEIRKLGVRCCPGSWWDQELYY

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

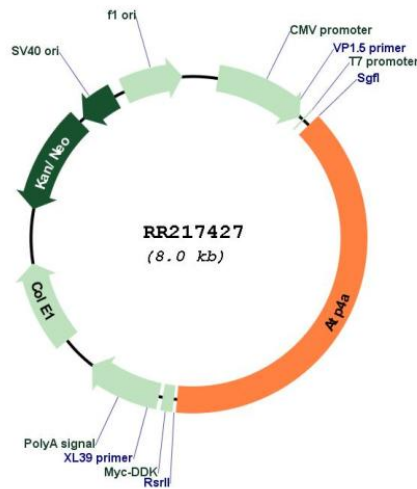
**Restriction Sites:**

Sgfl-RsrII

Cloning Scheme:



Plasmid Map:



ACCN:

NM\_012509

ORF Size:

3102 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](#)

|                               |   |
|-------------------------------|---|
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.  |
| <b>Components:</b>            | 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).  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol> |
| <b>RefSeq:</b>                | <u><a href="#">NM_012509.1</a></u> , <u><a href="#">NP_036641.1</a></u>   |
| <b>RefSeq Size:</b>           | 3105 bp   |
| <b>RefSeq ORF:</b>            | 3105 bp   |
| <b>Locus ID:</b>              | 24216   |
| <b>Cytogenetics:</b>          | 1q21  |
| <b>MW:</b>                    | 114.1 kDa   |
| <b>Gene Summary:</b>          | catalyzes H <sup>+</sup> and K <sup>+</sup> exchange; may play a role in secretion of stomach acids [RGD, Feb 2006]   |