

Product datasheet for **RR204209**

Atp1a4 (NM_022848) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atp1a4 (NM_022848) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Atp1a4
Synonyms: MGC93426
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR204209 representing NM_022848
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGCCTGGAAAAGAGACAGCGGCCACTAGTGAGCAGAAGCCAAGACCCACCCTTAGGGCTTCAAATA
CGAATAGACAGCCGAAAGTGAAGAAGGAAGAAAGATTTAGAGGAGTTGAAGAAGGAAGTGTTATGGA
CGATCACAAAGCTAACGTTGGATGAGCTGAGTGCCAAGTACTCTGTGGACTTGACCAAGGGTCTTAGCGTC
ACAGATGCCAGGAAATCTGACTCTAAATGGACCGAATGTAATAACCCCTCCTCAACCACTCCAGAAT
GGATCAAATCTGTAAACAATTATTTGGTGGCTTCTCCCTCCTGCTGTGGACTGGTTCCTTGCTCTGCTT
CCTGGCCTATGGCATAACATGTATCTTATTACCAAGAAAACGCCAACAAGATAATCTGTACCTGGGTATT
GTACTATCTGCCGTGGTCATCATCACTGGCTGCTTCTCATATTACCAGGAGGCGAAGAGCTCAAAGATCA
TGGAGTCTTTAAGACCATGGTGCCTCAGCAAGCTCTGGTAATTCGAGATGGAGAGAAAATGCAGATCAA
TGTAAGAGATGTGGTTTTGGGAGACCTAGTAGAAGTGAAGGGTGGAGACCAAGTCCCTGCTGATATCAGG
GTTATCGCTGCGCAAGGATGTAAGGTAGACAATTCCTCCTGACTGGGGAGTCAGAACCACAGTCTCGTT
GCCCTGATTGCACCCATGAGAACCCTCTGGAGACACGGAATATCATCTTCTTCCACCAACTGCGTAGA
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GCTCCACGTCACCATCTGCTCGGACAAGACTGGCACCCTCACCCAGAACCGCATGACGGTGGCTCATCT
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TCTACCAACAAGTACCAGATGTCTATTACCTTCTGGAAGATAACTCAGAAGCCACGTGCTGCTGATGA



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AAGGTGCTCCAGAAAGGATCTTGATTTTTGCTCCAGTTTCTGCTCAATGGGCAGGAGTACCCTATGGA
 CGAAGAAATGAAGACAGACTTCCAGAATGCCTACATAGAAGTGGGAGGTCTGGCGAGCGTGTGCTGGG
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ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR204209 representing NM_022848
 Red=Cloning site Green=Tags(s)

MEPGKETAATSEQKPRPTLRASNTNRQPKVKRRKKDLEELKKEVVMDDHKLTLDEL SAKYSVDLTKGLSV
 TDAQEILTLNGPNVLTTPPTPEWIKFKQQLFGGFSLLLWTGSLLCFLAYGIHVSYYQENANKDNLVYGI
 VLSAVVIITGCFSYQEAQSSKIMESFKTMVPQQALVIRDGEMQINVRDVVLGDLVEVKGQDQVPADIR
 VIAAQGCKVDNSSLTGESEPPSRCPDCTHENPLETRNIIFSTNCVEGTARGVVIATGDHTVMGRIASLT
 SGLTMGKTPIATEIEHFIIHITAVAVFLGVTFFFLSLILGYTWLDAVIFLIGIIVANVPEGLLATVTVCL
 TLTAKRMARKNCLVKNLEAVETLGSTSTICSDKTGTLTQNRMTVAHLWFDKTVYEADTSEEQTGKTFPK
 SSDTWFLARIAGLCNRADFKPHQESLPITKRITTTGDASESALLKFIQSYSPVSEMRQKNPKVAEIPFN
 STNKYQMSIHLLEDNSEAHVLLMKGAPERILDFCSSFLLNGQEYPMDEEMKTDQFNAYIELGGLGERVLG
 FCFNLNPSNFSKGFQFNTEELNFPMENLFCAGLISMIDPPRTAVPDAVSKCRSAGIKVIMVTDGHPITAK
 AIAKSVGIISEANETAEDIAARLNISISQVSNKSIKAIIVHGSSELKDMDSGQLDNILKSYKEIVFARTSP
 QQKLIIVEGCQRLGAIIVAVTGDGVNDSPALKKADIGIAMGITGSDVSKQAADMILLDDNFASIIVTVEEG
 RLIFDNLKKSIAVTLTSNIPEITPFLFIVLSIPLPLGTITILCIDLGTDMVPAISLAYETPESDIMKRL
 PRNPKTDNLVNDRLIGMAYGQIGMIQALAGFFTYFVILAENGFKPLDLLGIRLYWDDTNLNDLEDYGGQ
 WTYEQRKVVEFTCQTAFFISIVIVQWADLIICKTRRNSLFKQGMKNKVLIFGLLEETILAACL SYIPGMD
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

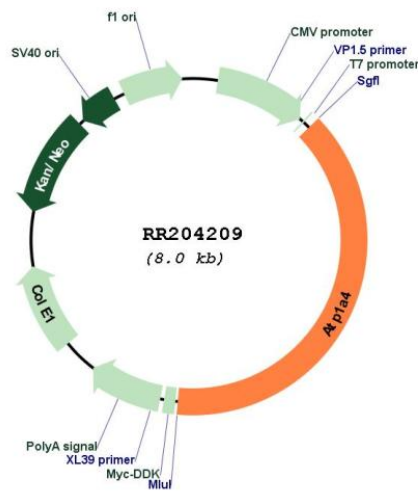
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_022848

ORF Size:

3084 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:	<ol style="list-style-type: none">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:	<u>NM_022848.3</u> , <u>NP_074039.1</u>
RefSeq Size:	3447 bp
RefSeq ORF:	3087 bp
Locus ID:	29132
UniProt ID:	<u>Q64541</u>
Cytogenetics:	13q24
MW:	114 kDa
Gene Summary:	alpha subunit isoform of Na ⁺ , K ⁽⁺⁾ -ATPase, which has sodium/potassium ion exchange activity; may be involved in regulation of intracellular hydrogen ion homeostasis and sperm motility [RGD, Feb 2006]