

Product datasheet for **RR217422**

Atp1a4 (NM_001271030) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atp1a4 (NM_001271030) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Atp1a4
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR217422 representing NM_001271030
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCTGGAAAAGAGACAGCGGCCACTAGTGAGCAGAAGCCAAGACCCACCCTTAGGGCTTCAAATA
CGAATAGACAGCCGAAAGTGAAAAGAAGGAAGAAAGATTTAGAGGAGTTGAAGAAGGAAGTGGTTATGGA
CGATCACAAAGCTAACGTTGGATGAGCTGAGTGCCAAAGTACTCTGTGGACTTGACCAAGGGTCTTAGCGTC
ACAGATGCCAGGAAATCTGACTCTAAATGGACCGAATGTAATAACCCCTCCTCCAACCACTCCAGAAT
GGATCAAATCTGTAAACAATTATTTGGTGGCTTCTCCCTCCTGCTGTGGACTGGTTCCTTGCTGCTGCTT
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GTAATACTGCGCTGGTCACTCATCACTGGCTGCTTCTCATATTACCAGGAGGCGAAGAGCTCAAAGATCA
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TGTAAGAGATGTGGTTTTGGGAGACCTAGTAGAAGTGAAGGGTGGAGACCAAGTCCCTGCTGATATCAGG
GTTATCGCTGCGCAAGGATGAAGGTAGACAATTCCTCCTTGACTGGGGAGTCAGAACCACAGTCTCGTT
GCCCTGATTGCACCCATGAGAACCCTCTGGAGACACGGAATATCATCTTCTTCTCCACCAACTGCGTAGA
AGGAACAGCCCGGGTGTGTGATTGCTACAGGAGACCACACAGTAATGGCCGGATTGCTTCCCTGACA
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TTCTGCTTCTGAATTTGCCTAGCAATTTCTCTAAGGGATTCCAATTTAATACCGAAGAATTAATTTTC
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CTAC
    
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ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
    
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Protein Sequence:

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>RR217422 representing NM_001271030
Red=Cloning site Green=Tags(s)
    
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MEPGKETAATSEQKPRPTLRASNTNRQPKVKRRKKDLEELKKEVVMDDHKLTLDEL SAKYSVDLTKGLSV
TDAQEILTLNGPNVLTPPPTTPEWIKFCKQLFGGFSLLLWTGSLLCFLAYGIHVSYYQENANKDNL YLGI
VLSAVVIITGCFSYQAEAKSSKIMESFKTMVPQQALVIRDGEKQINVRDVVLGDLVEVKGGDQVPADIR
VIAAQGCKVDNSLTGESEPQSRCPDCTHENPLETRNIIFSTNCVEGTARGVVIATGDHTVMGRIASLT
SGLTMGKTPIATEIEHF IHIITAVAVFLGVTFFFLSLILGYTWLDAVIFLIGIIVANVPEGLLATVTVCL
TLTAKRMARKNCLVKNLEAVETL GSTSTICSDKTGTLTQNRMTVAHLWFDKTVYEADTSEEQTTGKTFPK
SSDTWFYLARIAGLCNRADFKPHQESLPITKR TTTGDASESALLK FIEQSYSPVSEMRQKNPKVAEIPFN
STNKYQMSIHLLLEDNSEAHVLLMKGAPERILDFCSSFLLNGQEYPMDEEMK TDFQNAVIELGGLGERVLG
FCFLNLP SNFSKGFQFNTEELNFP MENLCFAGLISMIDPPRTAVPDAVSKCRSAGIKVIMVTGDHPITAK
AIAKSVGI ISEANETAEDIAARLNISISQVSNKSIKAIIVVHSELKDMSGQLDNILKSYKEIVFARTSP
QQKLIIVEGCQRLGAIIVAVTGDGVNDSPALKKADIGIAMGITGSDVSKQAADMILLDDNFASIVTGVVEEG
RLIFDNLKKSIA YTLTSNIPEITPFLLFIVLSIPLPLGTITILCIDLGTDMVPAISLAYETPESDIMKRL
PRNPKTDNLVNDRLIGMAYGQIGMIQALAGFFTYFVILAENGFKPLDLLGIRLYWDDTNLNDLEDYQGQ
WTYEQRKVVEFTCQTAFFISIVIVQWADLIICKTRRNSLFKQGMKNKVLIFGLLEETILAACLSYIPGMD
VALRMYPLKINWWFCALPYSVLIF IYDEVRKLIIRRRPGGWLEKETYY
    
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
    
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Restriction Sites:

SgfI-MluI

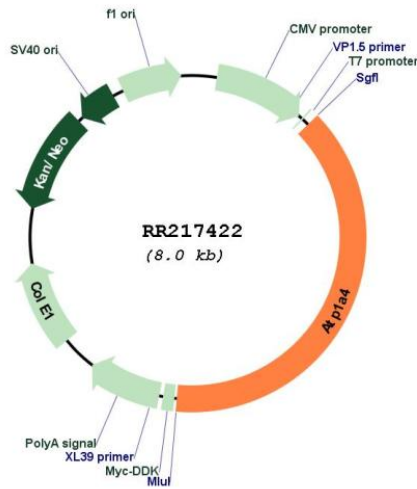
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001271030

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:	NM_001271030.1 , NP_001257959.1
RefSeq Size:	3491 bp
RefSeq ORF:	3087 bp
Locus ID:	29132
UniProt ID:	Q64541
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]