

Product datasheet for **RR207798**

Atp12a (NM_133517) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp12a (NM_133517) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atp12a
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR207798 representing NM_133517 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGCCGAAAACAGAAATTTATTCTGTAGAGCTCAACGGAAGTAAAGACGTCAAGCCAGCAGACCAGA
GGGATGACAAAAAGTTCAAAGGAGCGAAGAACAAGGACTTGAACCCAACAAGAGTCACGAGAAAGAGGA
GCTGAAGAAAGAACTTGATCTGGATGATCAGAGCTCAGTAATACAGAATTGGAACAGAAATATGGTACC
AACATCATCCAGGTCTCTCCAGCGTCAGAGCTACAGAGCTCCTGGCTCGGGATGGGCCAACACTCTTA
CCCCTCCAAGCAAACCTCCAGAGATTATCAAGTTCCTCAAGCAGATGGTGGGGGGCTTTCCATCCTCCT
GTGGATAGGTGCTGCCTTGTGCTGGATCGCATTGTGATCCAGTACGTCAACAATCCGCATCCCTAGAC
AACGTCTACTTGGGCGCCATACTTGTCTGGTTGTTATTTAACGGGGATTTTGTCTATTACCAAGAAG
CCAAAAGCACCAACATCATGGCCAGCTTAGTAAGATGATCCCCAGCAAGCTCTGTCTCCGAGATGC
CGAAAAGAAGGTCATTTACGAGAGCAACTGGTGGTGGGGGACGTTGTGGAGATTAAGGAGGGGACCAG
ATCCCTGCAGACATCAGACTGGTATTTCCCAAGGTGCAAAGTAGATAACTCCTCTCTCACTGGGGAAT
CTGAGCCCCAGGCTCGTTCAACTGAGTTTACCCATGAAAACCCCTTGAAACCAAGAACATAGGCTTCTA
TTCCACAACCTGCCTGGAAGGTACAGCAACTGGCATTGTATCAACACGGGTGACCGTACCATCATCGGG
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ACTGTCACTGTTACCCTGTCACTGACGGCAAAACGGATGGCCAAGAAGAACTGCCTGGTAAAGAATCTGG
AGGCAGTGGAGACTCTTGGCTCCACCTCCATCATCTGCTCAGACAAGACGGGGACCCTGACCCAGAACAG
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GCTTCTCGTGGTGTGAAAGGAGCCCCTGAGAGGATCTTAGAGAAGTGCAGCACCATCATGATCAATGG
CCAGGAGCAGCCACTGGACAAGAGCTCTGCTGATAGCTTCCACACAGCCTACATGGAGCTGGGCGGTCTG



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GGCAGCGTGTGTGGGTTTCTGTCACCTCTACTTGCCAGCAGAGCAGTCCCCAAAGTTACATCTTTG
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ACGCGTACGCGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR207798 representing NM_133517
 Red=Cloning site Green=Tags(s)

MRRKTEIYSVELNGTKDVKPADQRDDKFKGAKNKDLEPNKSHEKEELKKELDLDDHRLSNTLEQKYGT
 NIIQGLSSVRATELLARDGPNTLTPPKQTPETIIFLQKQVGGFSILLWIGAALCWIQAFVIQVNNASLD
 NVYLGAILVVLVILTGIFAYYQEAQSTNIMASFSKMIPQALVIRDAEKVISAQLVVGDVVEIKGGDQ
 IPADIRLVFSQGCKVDNSSLTGESEPARSTEFTHENPLETKNIGFYSTTCLEGTATGIVINTGDRTIIG
 RIASLASGVGSEKTPIAIEIEHFVHIVAGVAVSIGIIFITAVCMKYVLDIAIFLISIIIVANVPEGLLA
 TVTVTLSTAKRMAKKNCLVKNLEAVETLGSTSIICSDKTGTLTQNRMTVAHLWFDNQIFVADTSENQTK
 QAFDQSSGTWASLSKIIITLGNRAEFRPQGESVPMKRTVVGDASETALLKFSEVILGDVMGIRKRNHVA
 EIPFNSTNKFQLSIHETEDPNDKRFLVVMKGAPERILEKSTIMINGQEQLDKSSADSFHTAYMELGGL
 GERVLGFCHLYLPAEQFPQSYIFDVDSVNFPTSNFCFVGLLSMIDPPRSTVPDAVSKCRSAGIKVIMVTG
 DHPITAKAIAKSVGIISANNETVEDIAKRRNIAVEQVKNREAAVVTGMELKDMTPEQLDELLTNYQEI
 VFARTSPQQLIIVEGCQRQDAIVAVTGDGVNDSPALKKADIGIAMGIAGSDDAAKNAADMVLLDDNFASI
 VTGVEEGRILFDNLKKTIAAYTLTKNIAELCPFLIYIVAGLPLPIGTITILFIDLGTDIIPSIALAYEKA
 SDIMNRKPRHKKDRLVNTQLAIYSYLHIGLMQALGGFLVYFTVYAQQGFWPTSLINLRVAVETDDINDL
 EDSYQEWTRYQRKYLEWTGSTAFFVAIMIQQIADLIIRKTRRNSIFQQGLFRNKVIWVGASQVIVALI
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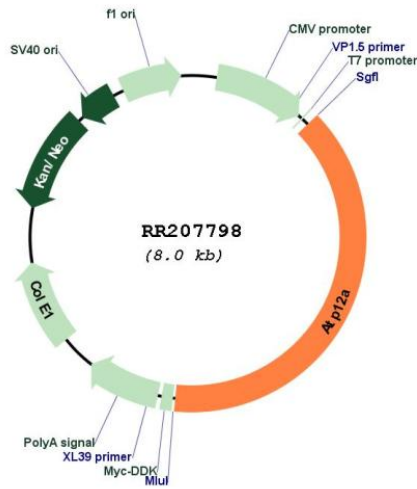
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM_133517

ORF Size: 3108 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_133517.2 , NP_598201.2
RefSeq Size:	4019 bp
RefSeq ORF:	3111 bp
Locus ID:	171028
Cytogenetics:	15p12
MW:	114.9 kDa
Gene Summary:	may act as a H ⁺ ,K ⁽⁺⁾ -ATPase in distal colon; may also play a role in K ⁺ absorption and H ⁺ secretion in the distal nephron [RGD, Feb 2006]