

Product datasheet for MR217558

Atp12a (NM_138652) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp12a (NM_138652) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atp12a
Synonyms:	Atp1a1; cHKA; HKalpha2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR217558 representing NM_138652 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGCCGAAAAACAGAAATCTATTCTGTAGAGCTCAATGGAACAAAGACGTCGAGCTGGCAGACCAGA
AAGATGACAAAAAGTTCAAGGGCGGAAGAACAAGACTCAGAACCAACAAGAGTCAGGAGGAGGAGCT
GAAGAAAGAACTTGATCTGGATGACCACAGACTCAGTAATACAGATTTGGAACAGAAATATGGTACAAAC
ATCATCCAGGGTCTCTCCAGTATCAGAGCTGCAGAGCTCCTGGCTCGGGATGGGCCAACGCCCTCACCC
CTCCCAAGCAAACCTCAGAGATCATCAAGTTCCCAAACAGATGGTGGGGGGCTTTTCCATCCTTCTGTG
GATAGGTGCAGCCTTGTGCTGGATCGCATATGTGATCCAGTATGTGAGCAGTACTGCATCCCTGGACAAT
GTCTATTTGGGGCCATACTTGTCTGGTCTGTTATTTAACGGGGATTTTGTCTATTACCAAGAAGCCA
AAAGTACCAACATTATGGCAAGCTTTAGTAAGATGATCCCCAGCAAGCTCTTGTGATCCGAGATGCAGA
AAAGAAGATCATTCAGCAGAGCAGCTGGTGGTGGGGACGTTGTGGAGATTAAGGAGGGGACCAGATC
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AGCCCCAGGCTCGGTCAACTGAGTTTACCCATGAAAACCCCTTGGAAACTAAGAACATAGGCTTCTATTC
TACAACGTGCCTGGAAGGTACGGCAACTGGCATTGTATCAACACGGGTGACCGCACCATCATCGGGCC
ATAGCTCCTTGGCTTCAGGCGTTGGGAGTGAGAAGACACCCATAGCCATTGAGATTGAGCATTTTGTCC
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GTCACTGTTACCTGTCACTGACGGCAAAGCGGATGGCTAAGAAGAACTGCTTGGTAAAGAACCTGGAGG
CCGTGGAGACGCTTGGCTCCACCTCCATCATCTGCTCAGATAAGACAGGGACCCTCACCCAGAACAGGAT
GACTGTGGCCCACTTGTGGTTTGACAACAGATCTTTGTGGCTGATACAAGTGAACAGACAAAAACAA
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TCAGGCCAGGCCAGGAGAGTGTCCCATCATGAAGAGAGTTGTGGTTGGAGATGCCTCAGAACTGCTCT
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ATTCTTTTAATTCTACCAACAAATTTTCAGCTCTCCATACATGAGACCGAGGACCCGAATGACAAGCGCT
 TCCTCATGGTGATGAAAGGGGCCCTGAGAGGATCTTAGAGAAGTGCAGCACCATCATGATCAACGGCCA
 GGAGCAGCCACTGGACAAGACTCTGCCGATGCCTTCCACACGGCCTACATGGAGCTGGTGGTCTGGGA
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 GATAGCTACGGGCAGGAATGGACGAGGTATCAGAGAAAATACCTGGAATGGACAGGCTCAACGGCTTTCT
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 TCCTACGGTCTCGGGAGTGTACAGCTCTGAGCTTTACCATGCTCAGGGCTCAGTACTGGTTTGTGGCTG
 TCCCGCATGCCATTTGATTTGGGTGATGACGAGATGCGGAAGTTGTTTCATCAGGCTCTACCCTGGAAG
 CTGGTGGGACAAGAACATGTATTAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR217558 representing NM_138652

Red=Cloning site Green=Tags(s)

MRRKTEIYSVELNGTKDVELADQKDDKFKGGKNDSEPNKSQEEELKKELDLDDHRLSNTDLEQKYGTN
 IIQGLSSIRAAELLARDGPNALTPPKQTPEIIKFLKQMVGGFSILLWIGAALCWIAYVIQVSSSTASLDN
 VYLGAILVLVILTGIFAYYQEAKSTNIMASFSKMIPQQALVIRDAEKKIIPAEQLVVGDVVEIKGGDQI
 PADIRLVFSQGCKVDNSSLTGESEPARSTEFTHENPLETKNIGFYSTTCLGEGTATGIVINTGDRTIIGR
 IASLASGVGSEKTPIAIEIEHFVHIVA AVAVSVGVIFITAVCMKYYVLDIIFLISIIVANVPEGLLAT
 VTVTLSTAKRMAKKNCLVKNLEAVETLGSTSIICSDKTGTLTQNRMTVAHLWFDNQIFVADTSENQTKQ
 AFDQSSGTWASLSKIITL CNRAEFRPGQESVPIMKR VVVGDASETALLKFSEVILGDVMDIRKRNHVAE
 IPFNSTNFKQLSIHETEDPNDKRF LMVMKGAPERILEKSTIMINGQEQPLDKSSADAFHTAYMELGGLG
 ERVLGFCHLYLPADKFPQSYTFD VDSINFPTS NLCFVGLLSMIDPPRSTVPDAVSKCRSAGIKVIMVTGD
 HPITAKAIAKSVGIIISANNETVEDIAKRRNIAVEQV NKREAKAAVVTGMELKDMTPEQLDELLINYQEIV
 FARTSPQKLIIVEGCQRQDAVAVTGDGVNDSPALKKADIGIAMGIAGSDAAKNAADMVLLDDNFASIV
 TGVEEGR LIFDNLKKTIA YTLTKNIAELCPFLIYIVAGLPLPIGTITILFIDLGTDIIPSIALAYEKAES
 DIMNRKPRHKKKDR LVNQLAIYSYLHIGLMQALGGFLVYFTVYAQQGFWPTSLINLRVSWETDDINDLE
 DSYGQEWTRYQRKYLEWTGSTAFFVAIMVQIADLIIRKTRRNSIFQQGLFRNKVIWVGIISQIIIVALVL
 SYGLGSVTALSF TMLRAQYWFVAVPHAILIWVYDEMRLFIRLYPGSWWDKNMYY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9012_a09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_138652

ORF Size: 3105 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_138652.2](#), [NP_619593.2](#)

RefSeq Size: 3954 bp

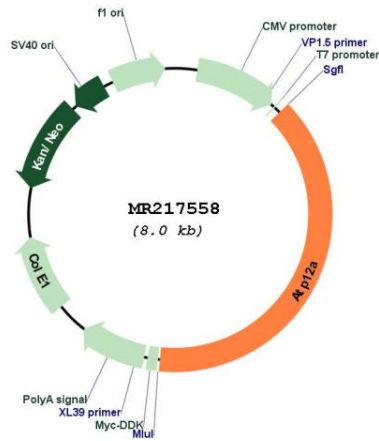
RefSeq ORF: 3108 bp

Locus ID: 192113

UniProt ID: [Q9Z1W8](#)

Cytogenetics: 14 C3
MW: 115.2 kDa
Gene Summary: Catalyzes the hydrolysis of ATP coupled with the exchange of H(+) and K(+) ions across the plasma membrane. Responsible for potassium absorption in various tissues.
 [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR217558