

Product datasheet for **MG217558**

Atp12a (NM_138652) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp12a (NM_138652) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Atp12a
Synonyms:	Atp1a1; cHKA; HKalpha2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG217558 representing NM_138652 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGCCGAAAACAGAAATCTATTCTGTAGAGCTCAATGGAACAAAGACGTCGAGCTGGCAGACCAGA
AAGATGACAAAAAGTTCAAGGGCGGAAGAACAAGACTCAGAACCAACAAGAGTCAGGAGGAGGAGCT
GAAGAAAGAACTTGATCTGGATGACCACAGACTCAGTAATACAGATTTGGAACAGAAATATGGTACAAC
ATCATCCAGGGTCTCTCCAGTATCAGAGCTGCAGAGCTCCTGGCTCGGGATGGGCCAACGCCCTCACCC
CTCCCAAGCAAACCTCAGAGATCATCAAGTTCCCAAACAGATGGTGGGGGGCTTTCCATCCTTCTGTG
GATAGGTGCAGCCTTGTGCTGGATCGCATATGTGATCCAGTATGTGAGCAGTACTGCATCCCTGGACAAT
GTCTATTTGGGCGCCATACTTGTCTGGTCTGTTATTTAACGGGGATTTTGCTTATTACCAAGAAGCCA
AAAGTACCAACATTATGGCAAGCTTTAGTAAGATGATCCCCAGCAAGCTCTTGTGATCCGAGATGCAGA
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CCTGCAGACATCAGACTGGTGTTCCTCAAGGGTGCAAAGTAGATAACTCCTCTCACTGGGGAGTCTG
AGCCCCAGGCTCGGTCAACTGAGTTTACCATGAAAACCCTTGGAACTAAGAACATAGGCTTCTATTC
TACAACGTGCCTGGAAGGTACGGCAACTGGCATTGTATCAACACGGGTGACCGCACCATCATCGGGCC
ATAGCTCCTTGGCTTCAGGCGTTGGGAGTGAGAAGACACCCATAGCCATTGAGATTGAGCATTTTGTCC
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CCGTGGAGACGCTTGGCTCCACCTCCATCATCTGCTCAGATAAGACAGGGACCCTCACCCAGAACAGGAT
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TCAGGCCAGGCCAGGAGAGTGTCCCATCATGAAGAGAGTTGTGGTTGGAGATGCCTCAGAACTGCTCT
GCTAAAGTCTCAGAGGTTATTTGGGTGATGTGATGGACATTAGAAAAGAAACCACAAAGTAGCTGAG



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ATTCCTTTTAATTCTACCAACAAATTTTCAGCTCTCCATACATGAGACCGAGGACCCGAATGACAAGCGCT
 TCCTCATGGTGATGAAAGGGGCCCTGAGAGGATCTTAGAGAAGTGCAGCACCATCATGATCAACGGCCA
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 TCCTACGGTCTCGGGAGTGTACAGCTCTGAGCTTTACCATGCTCAGGGCTCAGTACTGGTTTGTGGCTG
 TCCCGCATGCCATTTGATTTGGGTGATGACGAGATGCGGAAGTTGTTTCATCAGGCTCTACCCTGGAAG
 CTGGTGGGACAAGAACATGTATTAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG217558 representing NM_138652
 Red=Cloning site Green=Tags(s)

MRRKTEIYSVELNGTKDVELADQKDDKFKGKNKNDSEPNKSQEEELKKELDLDHRLSNTDLEQKYGTN
 IIQGLSSIRAEALLARDGPNALTPPKQTPEIIKFLKQMVGGFSILLWIGAALCWIAYVIQYVSSTASLDN
 VYLGAILVLVILVTGIFAYYQEAKSTNIMASFSKMIPQALVIRDAEKKIIPAEQLVVGDVVEIKGGDQI
 PADIRLVFSQCKVDNSSLTGESEPARSTEFTHENPLETKNIGFYSTTCLGATGIVINTGDRTIIGR
 IASLASGVGSEKTPIAIEIEHFVHIVA AVAVSVGVIFFITAVCMKYVLDIIFLISIIIVANPEGLLAT
 VTVTLSTAKRMAKKNCLVKNLEAVETLGSTSIICSDKTGTLTQNRMTVAHLWFDNQIFVADTSENQTKQ
 AFDQSSGTWASLSKIITLCNRAEFRPGQESVPIMKRVVVGDASETALLKFSEVILGDVMDIRKRNHVAE
 IPFNSTNKFQLSIHETEDPNDRFLMVMKGAPERILEKCSSTIMINGQEQPLDKSSADAFHTAYMELGGLG
 ERVLGFCHLYLPADKFPQSYTFDVSINFPTSNLCFVGLLSMIDPPRSTVPDAVSKCRSAGIKVIMVTDG
 HPITAKAIAKSVGII SANNETVEDIAKRRIAVEQVKNREAKAAVVTGMELKDMTPEQLDELLINYQEIV
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 TGVEEGRILFDNLKKTIAAYTLTKNIAELCPFLIYIVAGLPLPIGTITILFIDLGTDIIPSIALAYEKAES
 DIMNRKPRHKKKDRLVNKQLAIYSYLHIGLMQALGGFLVYFTVYAQQGFWPTSLINLRVSWETDDINDLE
 DSYGQEWTRYQRKYLEWTGSTAFFVAIMVQIADLIIRKTRRNSIFQQGLFRNKVIWVGII SQIIIVALVL
 SYGLGSVTALSF TMLRAQYWFVAVPHAILI WVYDEMRLFIRLYPGSWWDKNMYY

TRTRPLE - GFP Tag - V

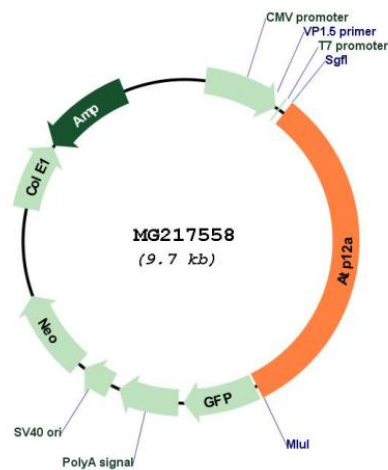
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



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:	<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_138652.2</u> , <u>NP_619593.2</u>
RefSeq Size:	3954 bp
RefSeq ORF:	3108 bp
Locus ID:	192113
UniProt ID:	<u>Q9Z1W8</u>
Cytogenetics:	14 C3
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]