

Product datasheet for RC235128

ATP1A3 (NM_001256214) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP1A3 (NM_001256214) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATP1A3
Synonyms:	AHC2; ATP1A1; CAPOS; DYT12; RDP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC235128 representing NM_001256214 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGTCTGGTGGCTCTGACAGCTATCGTATCGCCACCTCGCAGGACAAGAAAGATGACAAGGACTCAC
CCAAGAAGAACAAGGGCAAGGAGCGCCGGACCTGGATGACCTCAAGAAGGAGGTGGCTATGACAGAGCA
CAAGATGTCAGTGAAGAGGTCTGCCGAAATACAACACAGACTGTGTGCAGGGTTTGACCCACAGCAA
GCCCAGGAGATCCTGGCCGGGATGGGCCTAACGCACTCAGCCACCGCCTACCACCCAGAGTGGGTCA
AGTTTTGCCGGCAGCTCTTCGGGGCTTCTCCATCCTGCTGTGGATCGGGCTATCCTCTGCTTCTGGC
CTACGGTATCCAGCGGGCACCGAGGACGACCCCTCTGGTGACAACCTGTACCTGGGCATCGTGCTGGC
GCCGTGGTGATCATCACTGGCTGCTTCTCTACTACCAGGAGGCCAAGAGCTCCAAGATCATGGAGTCTT
TCAAGAACATGGTGCCCAAGCCCTGGTGATCCGGGAAGGTGAGAAGATGCAGGTGAACGCTGAGGA
GGTGGTGGTGGGGACCTGGTGGAGATCAAGGGTGGAGACCGAGTGCCAGCTGACCTGCGGATCATCTCA
GCCACGGCTGCAAGGTGGACAACCTCTCCCTGACTGGCGAATCCGAGCCCCAGACTCGCTCTCCGACT
GCACTCAGACAACCCCTTGGAGACTCGGAACATCACCTTCTTTCCACCAACTGTGTGGAAGGCACGGC
TCGGGGCGTGGTGGTGGCCACGGGCGACCGCACTGTGATGGCCGATCGCCACCTGGCATCAGGGCTG
GAGGTGGCAAGACGCCATCGCCATCGAGATTGAGCACTTCATCCAGCTCATCAGCGCTGCTGCTTCT
TCTGGGTGCTCCTTCTCATCCTCTCCCTATTCTCGGATACACCTGGCTTGAGGCTGTCATCTTCT
CATCGGCATCATCGTGGCAATGTCCCAGAGGGTCTGCTGGCCACTGCACTGTGTGTCTGACGCTGACC
GCCAAGCGCATGGCCGGAAGAACTGCCTGGTGAAGAACCTGGAGGCTGTAGAAACCTGGGCTCCACGT
CCACCATCTGCTCAGATAAGACAGGGACCTCACTCAGAACCAGCATGACAGTCGCCACATGTGGTTTGA
CAACCAGATCCACGAGGCTGACACCACTGAGGACCACTCAGGGACCTCATTTGACAAGAGTTCGCACACC
TGGGTGGCCCTGTCTCACATCGTGGGCTGCAATCGCGCTGTCTTCAAGGGTGGTCAGGACAACATCC
CTGTGCTCAAGAGGGATGTGGCTGGGGATGCGTCTGAGTCTGCCCTGCTCAAGTGCATCGAGCTGTCTC
TGCTCCGTGAAGCTGATGCGTGAACGCAACAAGAAAGTGGCTGAGATTCCCTTCAATTCACCAACAAA



[View online »](#)

TACCAGCTCTCCATCCATGAGACCGAGGACCCCAACGACAACCGATACCTGCTGGTGTGAAGGGTGCCC
 CCGAGCGCATCTGGACCGCTGCTCCACCATCTGCTACAGGGCAAGGAGCAGCCTCTGGACGAGGAAAT
 GAAGGAGGCCCTCCAGAAATGCCTACCTTGAGCTCGGTGGCCTGGGCGAGCGCGTCTTGGTTTCTGCCAT
 TATTACCTGCCCCGAGGAGCAGTTCCCAAGGGCTTTCCTTCGACTGTGATGACGTGAACCTCACACCGG
 ACAACCTCTGCTTTGTGGGCCTCATGTCCATGATCGACCCACCCGGGACGCGTCCCTGACGCGGTGGG
 CAAGTGTGCGAGCGCAGGCATCAAGGTATCATGGTACCAGGCGATCACCCTACGCGCAAGGCCATT
 CCAAGGGTGTGGGCATCATCTCTGAGGGCAACGAGACTGTGGAGGACATCGCCGCCCGCTCAACATTC
 CCGTCAGCCAGGTTAACCCCGGGATGCCAAGGCCTGCGTGATCCACGGCACCGACCTCAAGGACTTCAC
 CTCCGAGCAAATCGACGAGATCCTGCAGAAATCACACCGAGATCGTCTTCGCCCGCACATCCCCCAGCAG
 AAGCTCATCATTGTGGAGGGCTGTGAGAGACAGGGTGCAATTGTGGCTGTGACCGGGGATGGTGTGAACG
 ACTCCCCGCTCTGAAGAAGGCCGACATTGGGGTGGCCATGGGCATCGCTGGCTCTGACGTCTCAAAGCA
 GGCAGCTGACATGATCCTGCTGGACGACAACTTTCCTCCATCGTCACAGGGGTGGAGGAGGGCCGCTG
 ATCTTCGACAACCTAAGAAGTCCATTGCCTACACCTGACCAGCAATATCCCGGAGATCAGCCCTTCC
 TGCTGTTTCATCATGGCCAACATCCCGCTGCCCTGGGCACCATCACCATCTCTGCATCGATCTGGGCAC
 TGACATGGTCCCTGCCATCTCACTGGCGTACGAGGCTGCCGAAAGCGACATCATGAAGAGACAGCCAGG
 AACCCCGGACGGACAAATTGGTCAATGAGAGACTCATAGCATGGCCTACGGGACAGATTGGAATGATCC
 AGGCTCTCGGTGGCTTCTTCTTACTTTGTGATCCTGGCAGAAAATGGCTTCTTCCCGGCAACCTGGT
 GGGCATCCGGCTGAACTGGGATGACCGCACCGTCAATGACCTGGAAGACAGTTACGGGCAGCAGTGGACA
 TACGAGCAGAGGAAGGTGGTGGAGTTACCTGCCACACGGCCTTCTTTGTGAGCATCGTTGTCTCCAGT
 GGGCCGATCTGATCATCTGCAAGACCCGGAGGAACCTCGGTCTTCCAGCAGGGCATGAAGAACAAGATCCT
 GATCTTCGGGCTGTTTGGAGAGACGGCCCTGGCTGCCTTCTGTCTACTGCCCGGCATGGACGTGGCC
 CTGCGCATGTACCCTCTCAAGCCAGCTGGTGGTCTGTGCCTTCCCCTACAGTTTCTCATCTTCGTCT
 ACGACGAAATCCGCAAATCATCTGCGCAGGAACCCAGGGGGTGGGTGGAGAAGGAAACCTACTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC235128 representing NM_001256214
 Red=Cloning site Green=Tags(s)

MGSGGSDSYRIATSQDKKDDKSPKKNKGKERRDLDDLKKEVAMTEHKMSVEEVCRKYNTDCVQGLTHSK
 AQEILARDGPNALTPPPTPEWVKFCRQLFGGFSILLWIGAILCFLAYGIQAGTEDDPSGDNLYLGIVLA
 AVVITGCFSYQEAKSSKIMESFKNMVPQQALVIREGEKMQVNAEEVVVDLVEIKGGDRVPADLRIIS
 AHGCKVDNSSLTGESEPQTRSPDCTHDNPLETRNITFFSTNCVEGTARGVVVATGDRTVMGRIATLASGL
 EVGKTPIAIEIEHFIQLITGVAVFLGVSFFILSLILGYTWLEAVIFLIGIIVANVPEGLLATVTVCLTLT
 AKRMARKNCLVKNLEAVETLGSTSTICSDKTGTLTQNRMTVAHMFNDQIHEADTTEDQSGTSFDKSSHT
 WVALSHIAGLCNRAVFKGGQDNIPVLKRDVAGDASESALLKCIELSSGSVKLMRERKNKVAEIPFNSTNK
 YQLSIHETEDPNDNRYLLVMKGAPERILDRCSTILLQGKEQPLDEEMKEAFQNAYLELGGGLGERVLGFCH
 YYLPEEQFPKGFADFCDVNFITDNLFCVGLMSMIDPPRAAVPDAVGKCRSAGIKVIMVTDHPITAKAI
 AKGVGIISEGNETVEDIAARLNIPVSQVNPRDAKACVIHGTDLKDFTEQIDEILQNHTEIVFARTSPQQ
 KLIIIVEGCQRQGAIVAVTGDGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGR
 IFDNLKKSIAAYLTLSNIPEITPFLIFIMANIPLPLGTITILCIDLGTDMVPAISLAYEAAESDIMKRQPR
 NPRTDKLVNERLISMAYGQIGMIQALGGFFSYFVILAENGLPGLNVGIRLNWDDRTVNDLEDSYGGQWT
 YEQRKVVFEFTCHTAFFVSIVVVQWADLIICKTRRNSVQQGMKNKILIFGLFEETALAFLSYCPGMDVA
 LRMYPLKPSWWFCAPYSFLIFVYDEIRKLILRRNPGGWVEKETY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001256214

ORF Size: 3078 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_001256214.2](#)

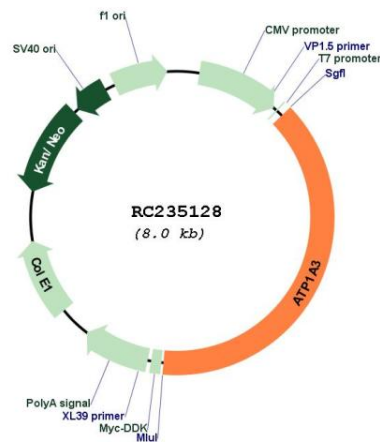
RefSeq Size: 3674 bp

RefSeq ORF: 3081 bp

Locus ID: 478
UniProt ID: [P13637](#)
Cytogenetics: 19q13.2
Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Cardiac muscle contraction
MW: 113.5 kDa

Gene Summary: The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na⁺/K⁺ -ATPases. Na⁺/K⁺ -ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The catalytic subunit of Na⁺/K⁺ -ATPase is encoded by multiple genes. This gene encodes an alpha 3 subunit. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

Product images:



Circular map for RC235128