

Product datasheet for RC210547

ATP1A4 (NM_001001734) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP1A4 (NM_001001734) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATP1A4
Synonyms:	ATP1A1; ATP1AL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210547 representing NM_001001734 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATCCAGGCTCTGGCTGGATTCTTTACCTACTTTGTAATCCTGGCTGAGAATGGTTTTAGGCCTGTTG
ATCTGCTGGGCATCCGCCTCCACTGGGAAGATAAATACTTGAATGACCTGGAGGACAGCTACGGACAGCA
GTGGACCTATGAGCAACGAAAAGTTGTGGAGTTCACATGCCAAACGGCCTTTTTTGTCCACATCGTGGTT
GTGCAGTGGCGGATCTCATCATCTCCAAGACTCGCCGCAACTCACTTTTCCAGCAGGGCATGAGAAACA
AAGTCTTAATATTTGGGATCCTGGAGGAGACACTTTGGCTGCATTTCTGTCCTACACTCCAGGCATGGA
CGTGGCCCTGCGAATGTACCCACTCAAGATAACCTGGTGGCTCTGTGCCATTCCTACAGTATTCTCATC
TTCGTCTATGATGAAATCAGAAAACCTCATCCGTCAGCACCCGGATGGCTGGGTGAAAGGGAGACGT
ACTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC210547 representing NM_001001734 Red=Cloning site Green=Tags(s)
-------------------	---

MIQALAGFFTYFVILAENGRFPVDLLGIRLHWEDKYLNDLEDSYGQQWYEQRKVVEFTCQTAFVFTIVV
VQWADLIISKTRNSLFQQGMRNKVLIIFGILEETLLAFLSYTPGMDVALRMYPLKITWWLCAIPYSILI
FVYDEIRKLLIRQHPDGWVERETYY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:	Sgfl-MluI
--------------------	-----------



[View online »](#)

Cloning Scheme:


ACCN: NM_001001734

ORF Size: 495 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_001001734.1](#), [NP_001001734.1](#)

RefSeq Size: 951 bp

RefSeq ORF: 498 bp

Locus ID: 480

UniProt ID: [Q13733](#)

Cytogenetics: 1q23.2

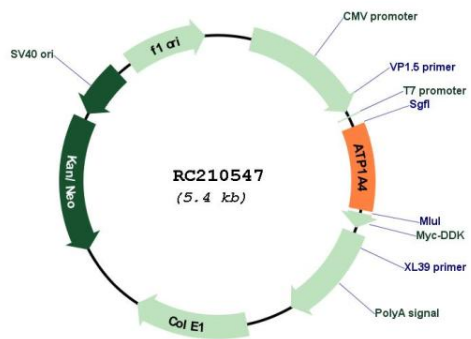
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cardiac muscle contraction

MW: 20.1 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 4 subunit. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC210547