

## Product datasheet for **SC306187**

### ATP1A4 (NM\_144699) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATP1A4 (NM_144699) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATP1A4
Synonyms:	ATP1A1; ATP1AL2
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_144699, the custom clone sequence may differ by one or more nucleotides

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ATGGGGCTTTGGGGGAAGAAAGGGACAGTGGCTCCCCATGACCAGAGTCCAAGACGAAGA
CCTAAAAAAGGGCTTATCAAGAAAAAATGGTGAAGAGGGAAAAACAGAAGCGCAATATG
GAGGAAGTGAAGAAGGAAGTGGTCATGGATGATCACAATTAACCTTGGAAAGAGCTGAGC
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ACTCGAGGTGGACCCAATACTGTTACCCACCCCCACCACTCCAGAATGGGTCAAATTC
TGTAAGCAACTGTTCCGAGGCTTCTCCCTCTACTATGGACTGGGGCCATTCTCTGCTTT
GTGGCCTACAGCATCCAGATATATTTCAATGAGGAGCCTACCAAAGACAACCTCTACCTG
AGCATCGTACTGTCCGTGGTTCATCGTCACTGGCTGCTTCTCTATTATCAGGAGGCC
AAGAGCTCCAAGATCATGGAGTCTTTAAGAACATGGTGCCTCAGCAAGCTCTGGTAATT
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CATGAGAACCCCTGGAGACCCGAAACATCTGCTTCTTTCCACCAACTGTGTGGAAGGA
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AAAAACCCCAAGGTGGCAGAGATTCCCTTTAATTCTACCAACAAGTACCAGATGTCCATC
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ATCTTGGAGTTTTGTTCTACCTTTCTTCTGAATGGGCAGGAGTCAATGAACGATGAA
ATGAAGGAAGCCTTCCAAAATGCCTACTTAGAACTGGGAGGTCTGGGGAAACGTGTGCTA
GGCTTCTGCTTCTTGAATCTGCCTAGCAGCTTCTCCAAGGGATTCCCATTTAATACAGAT

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GAAATAAATTTCCCATGGACAACCTTTGTTTTGTGGCCTCATATCCATGATTGACCCT  
 CCCCAGCTGCAGTGCCTGATGCTGTGAGCAAGTGTGCGAGTGCAGGAATTAAGGTGATC  
 ATGGTAACAGGAGATCATCCCATTACAGCTAAGGCCATTGCCAAGGGTGTGGGCATCATC  
 TCAGAAGGCACTGAGACGGCAGAGGAAGTCGCTGCCCGGCTTAAGATCCCTATCAGCAAG  
 GTCGATGCCAGTGTGCCAAAGCCATTGGTGCATGGTGCAACTGAAGGACATACAG  
 TCCAAGCAGCTTGATCAGATCCTCCAGAACCACCTGAGATCGTGTTCGCTCGGACCTCC  
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 ACAGGTGACGGGTGAACGACTCCCCTGCGCTGAAGAAGGCTGACATTGGCATTGCCATG  
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 GACGTGGCCCTGCGAATGTACCCACTCAAGATAACCTGGTGGCTCTGTGCCATTCCTAC  
 AGTATTCTCATCTTCGTCTATGATGAAATCAGAAAACCTCATCCGTCAGCACCCGGAT  
 GGCTGGGTGAAAAGGGAGACGTACTACTAA

- Restriction Sites:** Please inquire
- ACCN:** NM\_144699
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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\\_144699.2](#), [NP\\_653300.1](#)
- RefSeq Size:** 3873 bp
- RefSeq ORF:** 3090 bp

<b>Locus ID:</b>	480
<b>UniProt ID:</b>	<a href="#">Q13733</a>
<b>Cytogenetics:</b>	1q23.2
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Cardiac muscle contraction
<b>Gene Summary:</b>	<p>The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na<sup>+</sup>/K<sup>+</sup> -ATPases. Na<sup>+</sup>/K<sup>+</sup> -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<sup>+</sup>/K<sup>+</sup> -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]</p> <p>Transcript Variant: This variant (1) represents the longer transcript, and encodes the longer isoform (1).</p>