

Product datasheet for **SC300306**

beta 1 Sodium Potassium ATPase (ATP1B1) (NM_001001787) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	beta 1 Sodium Potassium ATPase (ATP1B1) (NM_001001787) Human Untagged Clone
Tag:	Tag Free
Symbol:	beta 1 Sodium Potassium ATPase
Synonyms:	ATP1B; MGC1798
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene sequence for NM_001001787 edited CAGCGGCAGCGGCGCTCCTGCCTGCAGAGAGCCAGGCCGAGAGAAGCCGAGCGGCGCAGA GGACGCCAGGGCGCGCCGCGCAGCCACCCACCTCCGGACCGCGGCGAGCTGCTGACCCGC CATCGCCATGGCCCGCGGAAAGCCAAGGAGGAGGGCAGCTGGAAGAAATTCATCTGGAA CTCAGAGAAGAAGGAGTTTCTGGGCAGGACCGGTGGCAGTTGGTTTAAGATCCTTCTATT CTACGTAATATTTTATGGCTGCCTGGCTGGCATCTTCATCGGAACCATCCAAGTGATGCT GCTCACCATCAGTGAATTTAAGCCACATATCAGGACCGAGTGGCCCCGCCAGGATTAAC ACAGATTCCTCAGATCCAGAAGACTGAAATTTCTTTTCGCTTAATGATCCCAAGAGCTA TGAGGCATATGTACTGAACATAGTTAGGTTCTGGAAAAGTACAAAGATTCAGCCCAGAG GGATGACATGATTTTTGAAGATTGTGGCGATGTGCCAGTGAACCGAAAGAACGAGGAGA CTTTAATCATGAACGAGGAGAGCGAAAGTCTGCAGATTCAGCTTGAATGGCTGGGAAA TTGCTCTGGATTAATGATGAACTTATGGCTACAAAGAGGGCAAACCGTGCATTATTAT AAAGCTCAACCGAGTTCTAGGCTTCAAACCTAAGCCTCCCAAGAATGAGTCTTGGAGAC TTACCCAGTGATGAAGTATAACCCAAATGTCTTCCCCTTCAAGTGCAGTGGCAAGCGAGA TGAAGATAAGGATAAAGTTGGAAATGTGGAGTATTTGGACTGGGCAACTCCCCTGGTTT TCCTCTGCAGTATTATCCGTAATATGGCAAACCTCCTGCAGCCAAATACCTGCAGCCCCT GCTGGCCGTACAGTTCACCAATCTTACCATGGACTGAAATTCGCATAGAGTGTAAAGGC GTACGGTGAGAACATTGGGTACAGTGAGAAAGACCGTTTTTCAGGGACGTTTTGATGTAAA AATTAATTTTAA
Restriction Sites:	Please inquire
ACCN:	NM_001001787



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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:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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_001001787.1, NP_001001787.1</u>
RefSeq Size:	1568 bp
RefSeq ORF:	906 bp
Locus ID:	481
Cytogenetics:	1q24.2
Protein Families:	Transmembrane
Protein Pathways:	Cardiac muscle contraction
Gene Summary:	<p>The protein encoded by this gene belongs to the family of Na⁺/K⁺ and H⁺/K⁺ ATPases beta chain proteins, 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 beta subunit regulates, through assembly of alpha/beta heterodimers, the number of sodium pumps transported to the plasma membrane. The glycoprotein subunit of Na⁺/K⁺ -ATPase is encoded by multiple genes. This gene encodes a beta 1 subunit. Alternatively spliced transcript variants encoding different isoforms have been described, but their biological validity is not known. [provided by RefSeq, Mar 2010]</p> <p>Transcript Variant: This variant (2) lacks a segment in the coding region, which leads to a frameshift, compared to variant 1. The resulting isoform (b) contains a shorter and distinct C-terminus compared to isoform a.</p>