

Product datasheet for SC312822

ATP1B2 (NM_001678) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP1B2 (NM_001678) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATP1B2
Synonyms:	AMOG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC312822 representing NM_001678. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
 ATGGTCATCCAGAAAGAGAAGAAGAGCTGCGGGCAGGTGGTTGAGGAGTGAAGGAGTTCGTGTGGAAC
 CCGAGGACGCACCAAGTTTATGGGCCGACCGGGACCACTGGGCCTTTATCCTCCTCTTCTACCTCGTT
 TTTTATGGGTTCCCTACCGCCATGTTCAACCTCACCATGTGGGTGATGCTGCAGACTGTCTCCGACCAT
 ACCCCCAAGTACCAGGACCGACTGGCCACACCGGGCTTGATGATTCGCCCCAAGACTGAGAACCTTGAT
 GTCATTGTCAATGTCAGTGACACTGAAAGCTGGGACCAGCATGTTCAAGAGCTCAACAAGTTCCTGGAG
 CCTTACAACGACTCTATCAAGCCCAAAAGAATGATGTCTGCCGCCCTGGACGCTATTACGAACAGCCA
 GATAATGGAGTCCCTCAACTACCCCAAACGTGCCTGCCAATTCAACCGGACCCAGCTGGGCAACTGTCTC
 GGCATTGGGGACTCCACCACTATGTTTACAGCACTGGGCAGCCCTGTGTCTTCAAGATGAACCGG
 GTCATCAACTTCTATGCAGGAGCAAACAGAGCATGAATGTTACCTGTGCTGGGAAGCGAGATGAAGAT
 GCTGAGAATCTCGGCAACTTCGTATGTTCCCCGCCAACGGCAACATCGACCTCATGTACTTCCCTAC
 TATGGCAAAAAGTTCCACGTGAACACACAGCCCTGGTGGCTGTGAAGTTCCTGAATGTGACCCCC
 AACGTGGAGGTGAATGTAGAATGTCGCATCAACGCCCAACATCGCCACAGACGATGAGCGAGACAAG
 TTCGCGCGCCGCTGGCCTTCAAACCTCCGATCAACAAAACCTGA
 ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:	SgfI-MluI
ACCN:	NM_001678
Insert Size:	873 bp


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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:	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:	<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_001678.4</u>
RefSeq Size:	3396 bp
RefSeq ORF:	873 bp
Locus ID:	482
UniProt ID:	<u>P14415</u>
Cytogenetics:	17p13.1
Domains:	Na_K-ATPase
Protein Families:	Transmembrane
Protein Pathways:	Cardiac muscle contraction
MW:	33.4 kDa

Gene Summary:

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 2 subunit. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2014]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.