

Product datasheet for RC200500L2

beta 1 Sodium Potassium ATPase (ATP1B1) (NM_001677) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	beta 1 Sodium Potassium ATPase (ATP1B1) (NM_001677) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	beta 1 Sodium Potassium ATPase
Synonyms:	ATP1B
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC200500).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:

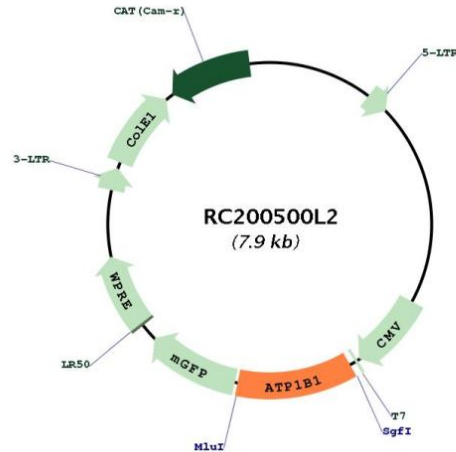


* The last codon before the Stop codon of the ORF.



[View online »](#)

Plasmid Map:



ACCN: NM_001677

ORF Size: 909 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_001677.3](#)

RefSeq Size: 2212 bp

RefSeq ORF: 912 bp

Locus ID:	481
UniProt ID:	P05026
Cytogenetics:	1q24.2
Domains:	Na_K-ATPase
Protein Families:	Transmembrane
Protein Pathways:	Cardiac muscle contraction
MW:	35.1 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 1 subunit. Alternatively spliced transcript variants encoding different isoforms have been described, but their biological validity is not known. [provided by RefSeq, Mar 2010]