

### Product datasheet for RC219880L4

#### OriGene Technologies, Inc.

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#### beta 1 Sodium Potassium ATPase (ATP1B1) (NM 001001787) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** beta 1 Sodium Potassium ATPase (ATP1B1) (NM\_001001787) Human Tagged Lenti ORF Clone

Tag: mGFP

**Symbol:** beta 1 Sodium Potassium ATPase

Synonyms: ATP1B; MGC1798

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

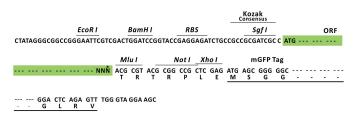
The ORF insert of this clone is exactly the same as(RC219880).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001001787

ORF Size: 903 bp





# beta 1 Sodium Potassium ATPase (ATP1B1) (NM\_001001787) Human Tagged Lenti ORF Clone – RC219880L4

**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: <u>NM 001001787.1</u>, <u>NP 001001787.1</u>

RefSeq Size: 1568 bp
RefSeq ORF: 905 bp
Locus ID: 481

Cytogenetics: 1q24.2

**Protein Families:** Transmembrane

**Protein Pathways:** Cardiac muscle contraction

**MW:** 34.7 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

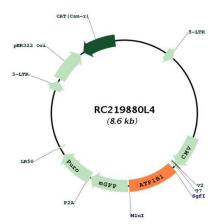
beta subunit regulates, through assembly of alpha/beta heterodimers, the number of sodium pumps transported to the plasma membrane. The glycoprotein subunit of Na+/K+ -ATPase is encoded by multiple genes. This gene encodes a beta 1 subunit. Alternatively spliced

transcript variants encoding different isoforms have been described, but their biological

validity is not known. [provided by RefSeq, Mar 2010]



## **Product images:**



Circular map for RC219880L4