

Product datasheet for RC229056L3

OriGene Technologies, Inc.

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Sodium Potassium ATPase (ATP1A1) (NM_001160234) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Sodium Potassium ATPase (ATP1A1) (NM_001160234) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Sodium Potassium ATPase

Synonyms: CMT2DD; HOMGSMR2

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

ORF Nucleotide

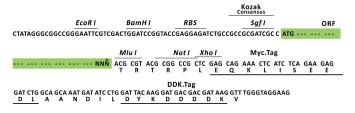
The ORF insert of this clone is exactly the same as(RC229056).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



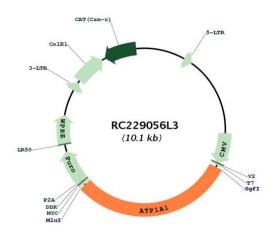


 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_001160234

ORF Size: 3072 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore,

OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by

calling 301.340.3188 option 3 for pricing and delivery.

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).



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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 001160234.1</u>, <u>NP 001153706.1</u>

RefSeq Size: 3587 bp
RefSeq ORF: 2979 bp
Locus ID: 476
UniProt ID: P05023

Cytogenetics: 1p13.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cardiac muscle contraction

MW: 112.9 kDa

Gene Summary: The protein encoded by this gene belongs to the family of P-type cation transport ATPases,

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 catalytic subunit of Na+/K+ - ATPase is encoded by multiple genes. This gene encodes an alpha 1 subunit. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, May 2009]