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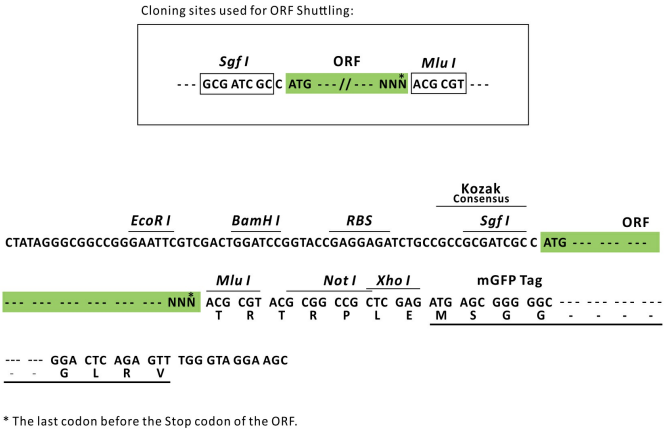
# Product datasheet for RC212619L4

## ATP2B1 (NM_001682) Human Tagged Lenti ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | ATP2B1 (NM_001682) Human Tagged Lenti ORF Clone |
| **Tag:** | mGFP |
| **Symbol:** | ATP2B1 |
| **Synonyms:** | PMCA1; PMCA1kb |
| **Mammalian Cell Selection:** | Puromycin |
| **Vector:** | pLenti-C-mGFP-P2A-Puro (PS100093) |
| **E. coli Selection:** | Chloramphenicol (34 ug/mL) |
| **ORF Nucleotide Sequence:** | The ORF insert of this clone is exactly the same as(RC212619). |
| **Restriction Sites:** | SgfI-MluI |
| **Cloning Scheme:** | |

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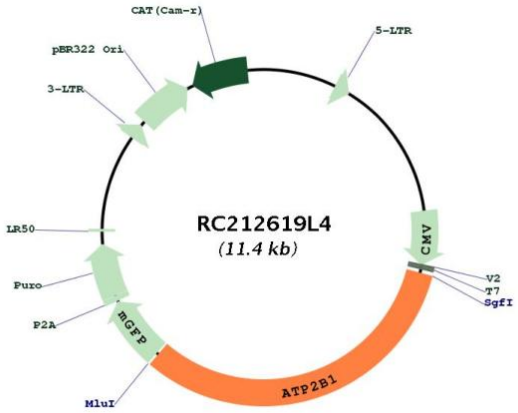
Plasmid Map:




**ACCN:** NM_001682

**ORF Size:** 3660 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).

| | |
|---|---|
| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_001682.2 |
| **RefSeq Size:** | 6967 bp |
| **RefSeq ORF:** | 3663 bp |
| **Locus ID:** | 490 |
| **UniProt ID:** | P20020 |
| **Cytogenetics:** | 12q21.33 |
| **Domains:** | E1-E2_ATPase, Cation_ATPase_N, Hydrolase, Cation_ATPase_C |
| **Protein Families:** | Druggable Genome, Transmembrane |
| **Protein Pathways:** | Calcium signaling pathway |
| **MW:** | 134.7 kDa |
| **Gene Summary:** | The protein encoded by this gene belongs to the family of P-type primary ion transport ATPases characterized by the formation of an aspartyl phosphate intermediate during the reaction cycle. These enzymes remove bivalent calcium ions from eukaryotic cells against very large concentration gradients and play a critical role in intracellular calcium homeostasis. The mammalian plasma membrane calcium ATPase isoforms are encoded by at least four separate genes and the diversity of these enzymes is further increased by alternative splicing of transcripts. The expression of different isoforms and splice variants is regulated in a developmental, tissue- and cell type-specific manner, suggesting that these pumps are functionally adapted to the physiological needs of particular cells and tissues. This gene encodes the plasma membrane calcium ATPase isoform 1. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008] |