

Product datasheet for RC223934L3

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OriGene Technologies, Inc.

ATP2B2 (NM_001683) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ATP2B2 (NM_001683) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: ATP2B2

Synonyms: PMCA2; PMCA2a; PMCA2i

Mammalian Cell Puromycin

Selection:

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(RC223934).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_001683

ORF Size: 3594 bp





ATP2B2 (NM_001683) Human Tagged Lenti ORF Clone - RC223934L3

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 001683.3</u>

RefSeq Size:8827 bpRefSeq ORF:3597 bp

Locus ID: 491

Cytogenetics: 3p25.3

Domains: E1-E2_ATPase, Cation_ATPase_N, Hydrolase, Cation_ATPase_C

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Calcium signaling pathway

MW: 132.6 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 2. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]