

## Product datasheet for RC216526L3

### ATP2A1 (NM\_004320) Human Tagged Lenti ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATP2A1 (NM_004320) Human Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	ATP2A1
Synonyms:	ATP2A; SERCA1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC216526).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

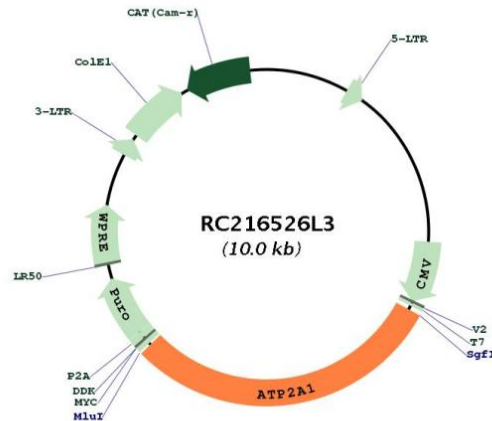
Cloning sites used for ORF Shuttling:



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



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**Plasmid Map:**


**ACCN:** NM\_004320

**ORF Size:** 2982 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\\_004320.4](#)

**RefSeq Size:** 3570 bp

**RefSeq ORF:** 2985 bp

<b>Locus ID:</b>	487
<b>UniProt ID:</b>	<a href="#">O14983</a>
<b>Cytogenetics:</b>	16p11.2
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Alzheimer's disease, Calcium signaling pathway
<b>MW:</b>	109.3 kDa
<b>Gene Summary:</b>	<p>This gene encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen, and is involved in muscular excitation and contraction. Mutations in this gene cause some autosomal recessive forms of Brody disease, characterized by increasing impairment of muscular relaxation during exercise. Alternative splicing results in three transcript variants encoding different isoforms. [provided by RefSeq, Oct 2013]</p>