

## Product datasheet for RN200367

### Atp2a2 (NM\_001110139) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Atp2a2 (NM\_001110139) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Atp2a2  
**Synonyms:** Serca2; Sercall  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN200367 representing NM\_001110139  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGAGAACGCTCACACAAAGACCGTGGAGGAGGTGCTGGGCCACTTCGGCGTCAACGAGAGCACGGGGC  
 TGAGCCTGGAGCAGGTCAAGAAGCTCAAGGAGAGATGGGGCTCCAACGAATTGCCGGCTGAAGAAGGAAA  
 GACCTTGCTGGAACCTTGATCGAGCAGTTGAAGACTTACTAGTTAGAATTTTATTGCTGCCAGCATGT  
 ATATCTTTCGTTTTGGCTTGGTTTCAAGAAGGTGAAGAAACGATTACAGCCTTTGTAGAACCTTTGTAA  
 TTCTGCTTATATTGGTAGCCAATGCAATTGTGGGTGTATGGCAGGAGAGAAACGCTGAAAATGCAATAGA  
 AGCTCTTAAGGAGTATGAACCTGAAATGGGCAAGGTGTATCGACAGGACAGAAAGAGTGTGCAGCGGATT  
 AAAGCGAAAGATATAGTTCCTGGGGATATAGTGGAAATGCTGTTGGTGACAAAGTTCGGCTGACATTA  
 GATTGACATCCATCAAGTCTACAACCTGAGAGTTGACCAGTCGATTCTTACAGGTGAATCTGTCTCGGT  
 CATCAAGCATACTGACCCTGTCCCTGACCCACGAGCTGTTAATCAAGACAAAAAGAACATGCTCTTTTCT  
 GGCACAAAACATCGCTGCTGGCAAAGCTATGGGAGTGGTGGTGGCGACTGGAGTCAATACTGAGATCGGCA  
 AGATCCGGGATGAAATGGTTGCAACAGAACAGGAGAGAACCCCTACAGCAGAAGCTGGACGAGTTTGG  
 GGAACAGCTTTCCAAAGTTATCTCCCTCATTTCGATTGCACTGAGTCAACATCGGGCATTTCAT  
 GACCCAGTTCATGGTGGCTCTTGGATCAGAGGTGCCATCTACTACTTTAAGATTGCAAGTGGCCCTGGCTG  
 TTGCTGCCATCCCTGAGGGTCTGCCTGCTGTCATCACCACCTGCTTGGCTCTTGGAACTCGAAGGATGGC  
 AAAGAAAAATGCTATTGTTCAAGTCTGCCTTCTGTGAAACCCTTGGTTGACTTCTGTTATCTGCTCA  
 GACAAGACCGGCACACTTACCACAAACCAGATGTCCTGCTGCAGGATGTTCACTTGGACAAAGTAGAAG  
 GTGATACTTGTCCCTTAATGAGTTTACCATAACTGGATCAACCTATGCACCCATTGGAGAAGTGCAAAA  
 AGATGACAAGCCAGTAAATGCCATCAGTATGACGGGCTTGTAGAGTTAGCAACGATCTGTGCTCTGTGT  
 AATGACTCTGCTTTGGATTACAATGAGGCGAAGGGTGTGTATGAAAAAGTTGGAGAAGCCACAGAGACTG  
 CTCTCACGTGCCTGGTAGAGAAGATGAATGTATTTCGACACGGAGCTGAAGGGACTTTCTAAAATAGAACC  
 CGCCAACGCCCTGCAACTCGGTCAAAAACAGCTCATGAAGAAGGAATTCACGCTAGAGTTTTACAGTGAT  
 AGAAAAATCAATGTCCGTCTACTGTACACCAAACAAACCGAGCCGGACGTCATGAGCAAGATGTTTGTGA



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AGGGTGCTCCAGAAGGTGTCATCGACAGGTGCACCCACATCCGAGTTGGAAGTACCAAGGTCCCCATGAC
GCCTGGTGTAAACAGAAGATTATGTCTGTCATTCGGGAGTGGGGCAGTGGCAGCGACACTGCGGTGC
CTGGCTCTGGCCACTCATGACAACCCGCTGAGGAGAGAGGAGATGCACCTGGAAGATTCTGCGAACTTCA
TCAAATATGAGACCAATCTGACTTTTCGTTGGCTGTGTGGGCATGCTGGACCCTCCAGGATTGAAGTGGC
CTCTTCTGTGAAGCTGTGCCGCAAGCGGGCATCCGAGTCATCATGATCACTGGGATAACAAAGGCACT
GCTGTGGCCATCTGTCCCGCATTGGCATCTTTGGCAGGATGAGGATGTGACATCAAAGGCTTTTACAG
GGCGAGAATTTGATGAATTAAGCCCTCAGCCAGAGAGACGCTGCTTAAATGCCCGTTGTTTTGCTCG
AGTTGAACCTTCCACAAGTCTAAGATCGTTGAGTTCCTGCAGTCTTTGATGAGATCACAGCTATGACT
GGTGATGGTGTGAACGACGCGCCGCTCTGAAGAAGTCGAAATCGGGATTGCCATGGGCTCAGGGACTG
CAGTGGCTAAGACGCGCTCTGAGATGGTGTGGCCGACGACAACCTCTCCACCATCGTGGCCGCTGTTGA
GGAGGGGCGGCCATCTACAACAACATGAAGCAGTTTATCCGCTACCTCATCTCTCCAACGTGGGGGAG
GTGGTCTGTATCTTCTGACGGCAGCCCTTGGGTTTCTGAAGCTTTGATTCTGTCCAGTTACTCTGGG
TCAATCTGGTGACGGATGGTCTGCCTGCCACTGCGCTGGGTTCAATCCTCCAGATCTGGACATCATGAA
CAAACCCACGGAACCCAAAAGAACCCTGATCAGCGGGTGGCTTTTTCCGTTACCTGGCTATTGGC
TGTTATGTTGGCGCTGCCACCGTGGGTGCTGCTGCGTGGTGGTTCATCGTGTGACGGTGGTCCGAGAG
TCTCCTTCTACCAGCTGAGTCATTTCTGCAGTGTAAAGGAGACAACCCAGACTTGAAGGAGTGGATTG
TGCAATCTTTGAGTCCCGTATCCGATGACAATGGCACTTTCTGTTCTAGTCACCATAGAGATGTGCAAT
GCCCTCAACAGCTTGTCTGAAAACAGTCCCTGCTGAGGATGCCCCCTGGGAGAACATCTGGCTCGTGG
GCTCCATCTGCTTGTCCATGTCCCTTCACTTCTTGATCCTCTACGTGGAACCTTTGCCACTCATTTTCCA
GATCACACCGCTGAATCTGACCCAGTGGCTGATGGTGTGAAAATCTCCCTGCCTGTGATCCTCATGGAC
GAGACGCTCAAGTTTGTGGCCGAAACTACCTGGAGCTGCAATACTGGAGTAA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_001110139
<b>Insert Size:</b>	2994 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001110139.2</a></u> , <u><a href="#">NP_001103609.1</a></u>
<b>RefSeq Size:</b>	4303 bp
<b>RefSeq ORF:</b>	2994 bp
<b>Locus ID:</b>	29693

UniProt ID: [P11507](#)

Cytogenetics: 12q16

Gene Summary: sarco(endo)plasmic reticulum Ca(2+) ATPase; involved in calcium transport and cycling in the heart and in calcium sequestering in enamel forming cells [RGD, Feb 2006]  
Transcript Variant: This variant (2) differs in the 3' UTR and coding region compared to variant 3. The resulting isoform (a), also known as SERCA2A, has a shorter and distinct C-terminus compared to isoform b.