

## Product datasheet for **RN200368**

### Atp2a2 (NM\_001110823) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Atp2a2 (NM\_001110823) 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:** >RN200368 representing NM\_001110823  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**C

ATGGAGAACGCTCACACAAGACCGTGGAGGAGGTGCTGGGCCACTTCGGCGTCAACGAGAGCACGGGGC  
 TGAGCCTGGAGCAGGTCAAGAAGCTCAAGGAGAGATGGGGCTCCAACGAATTGCCGGCTGAAGAAGGAAA  
 GACCTTGCTGGAACCTTGATCGAGCAGTTGAAGACTTACTAGTTAGAATTTTATTGCTGCCAGCATGT  
 ATATCTTTCGTTTTGGCTTGGTTTCAAGAAGGTGAAGAAACGATTACAGCCTTTGTAGAACCTTTGTAA  
 TTCTGCTTATATTGGTAGCCAATGCAATTGTGGGTGTATGGCAGGAGAGAAACGCTGAAAATGCAATAGA  
 AGCTCTTAAGGAGTATGAACCTGAAATGGGCAAGGTGTATCGACAGGACAGAAAGAGTGTGCAGCGGATT  
 AAAGCGAAAGATATAGTTCCTGGGGATATAGTGGAAATGCTGTTGGTGACAAAGTCCGGCTGACATTA  
 GATTGACATCCATCAAGTCTACAACCTGAGAGTTGACCAGTCGATTCTTACAGGTGAATCTGTCTCGGT  
 CATCAAGCATACTGACCCTGTCCCTGACCCACGAGCTGTTAATCAAGACAAAAAGAACATGCTCTTTTCT  
 GGCACAAAACATCGCTGCTGGCAAAGCTATGGGAGTGGTGGTGGCGACTGGAGTCAATACTGAGATCGGCA  
 AGATCCGGGATGAAATGGTTGCAACAGAACAGGAGAGAACCCCTACAGCAGAAGCTGGACGAGTTTGG  
 GGAACAGCTTTCCAAAGTTATCTCCCTCATTTCGATTGCACTGAGTCAACATCGGGCATTTCAT  
 GACCCAGTTCATGGTGGCTCTTGGATCAGAGGTGCCATCTACTACTTTAAGATTGCAAGTGGCCCTGGCTG  
 TTGCTGCCATCCCTGAGGGTCTGCCTGCTGTCATCACCACTGCTTGGCTCTTGGAACTCGAAGGATGGC  
 AAAGAAAAATGCTATTGTTCAAGTCTGCCTTCTGTGGAAACCCTTGGTTGACTTCTGTTATCTGCTCA  
 GACAAGACCGGCACACTTACCACAAACCAGATGTCCTGCTGCAGGATGTTCACTTGGACAAAGTAGAAG  
 GTGATACTTGTCCCTTAATGAGTTTACCATAACTGGATCAACCTATGCACCCATTGGAGAAGTGCAAAA  
 AGATGACAAGCCAGTGAATGCCATCAGTATGACGGGCTTGTAGAGTTAGCAACGATCTGTCTCTGTGT  
 AATGACTCTGCTTTGGATTACAATGAGGCGAAGGGTGTGTATGAAAAAGTTGGAGAAGCCACAGAGACTG  
 CTCTCACGTGCCTGGTAGAGAAGATGAATGTATTCGACACGGAGCTGAAGGGACTTTCTAAAATAGAACC  
 CGCCAACGCCCTGCAACTCGGTCAAAAACAGCTCATGAAGAAGGAATTCACGCTAGAGTTTTACAGTGAT  
 AGAAAAATCAATGTCCGTCTACTGTACACCAAACAAACCGAGCCGGACGTCATGAGCAAGATGTTTGTGA



AGGGTGCTCCAGAAGGTGTCATCGACAGGTGCACCCACATCCGAGTTGGAAGTACCAAGGTCCCCATGAC  
 GCCTGGTGTAAACAGAAGATTATGTCTGTCAATTCGGGAGTGGGGCAGTGGCAGCGACACTGCGGTGC  
 CTGGCTCTGGCCACTCATGACAACCCGCTGAGGAGAGAGGAGATGCACCTGGAAGATTCTGCGAACTTCA  
 TCAAATATGAGACCAATCTGACTTTTCGTTGGCTGTGTGGGCATGCTGGACCCTCCAGGATTGAAGTGGC  
 CTCTTCTGTGAAGCTGTGCCGCAAGCGGGCATCCGAGTCATCATGATCACTGGGATAACAAAGGCACT  
 GCTGTGGCCATCTGTCCGCCATTGGCATCTTTGGCAGGATGAGGATGTGACATCAAAGGCTTTTACAG  
 GCGGAGAATTTGATGAATTAAGCCCTCAGCCAGAGAGACGCTTAAATGCCCGTTGTTTTGCTCG  
 AGTTGAACCTTCCACAAGTCTAAGATCGTTGAGTTCCTGCAGTCCTTTGATGAGATCACAGCTATGACT  
 GGTGATGGTGTGAACGACGCGCCGCTCTGAAGAAGTCGAAATCGGGATTGCCATGGGCTCAGGGACTG  
 CAGTGGCTAAGACGGCCTCTGAGATGGTCTGGCCGACGACAACCTCTCCACCATCGTGGCCGCTGTTGA  
 GGAGGGGCGGCCATCTACAACAACATGAAGCAGTTTATCCGCTACCTCATCTCTCCAACGTGGGGGAG  
 GTGGTCTGTATCTTCTGACGGCAGCCCTTGGTTTTCTGAAGCTTTGATTCTGTCCAGTTACTCTGGG  
 TCAATCTGGTGACGGATGGTCTGCCTGCCACTGCGCTGGGTTCAATCCTCCAGATCTGGACATCATGAA  
 CAAACCCCGACGGAACCCAAAAGAACCCTGATCAGCGGGTGGCTTTTTCCGTTACCTGGCTATTGGC  
 TGTTATGTTGGCGCTGCCACCGTGGGTGCTGCTGCGTGGTGGTTCATCGTGCTGACGGTGGTCCGAGAG  
 TCTCCTTCTACCAGCTGAGTCATTTCTGCAGTGAAGGAGGACAACCCAGACTTGAAGGAGTGGATTG  
 TGCAATCTTTGAGTCCCCGATCCGATGACAATGGCACTTTCTGTTCTAGTCACCATAGAGATGTGCAAT  
 GCCCTCAACAGCTTGTCTGAAAACAGTCCCTGCTGAGGATGCCCCCTGGGAGAACATCTGGCTCGTGG  
 GCTCCATCTGCTTGTCCATGTCCCTTCACTTCTTGATCTCTACGTGGAACCTTTGCCACTCATTTC  
 GATCACACCGCTGAATCTGACCCAGTGGCTGATGGTGTGAAAATCTCCCTGCCTGTGATCTCATGGAC  
 GAGACGCTCAAGTTTGTGGCCGAACTACCTGGAGCCTGGTAAAGAGTGTGCGCAGCCTGCCACCAAAC  
 CCTCTGCTCCCTGTGCGCATGCACCGACGGCATTCTGGCCCTTTGTGCTGCTCATTATGCCCTGGT  
 GGCTGGGTCTACAGCACAGACACTAATTTAGTGATATGTTCTGGTCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

Sgfl-Mlul

**ACCN:**

NM\_001110823

**Insert Size:**

3132 bp

**OTI Disclaimer:**

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).

**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\_001110823.2, NP\_001104293.1

**RefSeq Size:**

4471 bp

**RefSeq ORF:**

3132 bp

Locus ID: 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 (3) encodes the longer isoform (b), also known as SERCA2B.