

## Product datasheet for **SC310014**

### SERCA3 (ATP2A3) (NM\_005173) Human Untagged Clone

#### Product data:

|               |  |
|---------------|--|
| Product Type: | Expression Plasmids                              |
| Product Name: | SERCA3 (ATP2A3) (NM_005173) Human Untagged Clone |
| Tag:          | Tag Free   |
| Symbol:       | ATP2A3   |
| Synonyms:     | SERCA3   |
| Vector:       | <u>pCMV6 series</u>                              |

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_005173, the custom clone sequence may differ by one or more nucleotides

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ATGGAGGCGGCGCATCTGCTCCCGGCCGCGACGTGCTGCGCCACTTCTCGGTGACAGCC
GAGGGCGGCTGAGCCCGGCGCAGGTGACCGGCGCGGGAGCGCTACGGCCCAACGAG
CTCCCGAGTGAGGAAGGGAAGTCCCTGTGGGAGCTGGTGTGGAACAGTTTGAGGACCTC
CTGGTGCATCCTGCTGCTGGCTGCCCTTGTCTCCTTTGCTCCTGGCCTGGTTCGAGGAG
GGCGAGGAGACCACGACCGCCTTCGTGGAGCCCTGGTCATCATGCTGATCCTCGTGGCC
AACGCCATTGTGGCGTGTGGCAGGAACCAACCCGAGAGTGCCATCGAGGCCCTGAAG
GAGTATGAGCCTGAGATGGGCAAGGTGATCCGCTCGGACCGCAAGGGCGTGCAGAGGATC
CGTGCCCGGACATCGTCCCAGGGGACATTGTAGAAGTGGCAGTGGGGGACAAAGTGCCT
GCTGACCTCCGCCTCATCGAGATCAAGTCCACCACGCTGCGAGTGGACCAAGTCCATCCTG
ACGGGTGAATCTGTGTCCGTGACCAAGCACACAGAGGCCATCCCAGACCCAGAGCTGTG
AACCAGGACAAGAAGAACATGCTGTTTTCTGGCACCAATATCACATCGGGCAAAGCGGTG
GGTGTGGCCGTGGCCACCGGCCTGCACACGGAGCTGGGCAAGATCCGGAGCCAGATGGCG
GCAGTCGAGCCCGAGCGGACCGCCTGCAGCGCAAGCTGGACGAGTTTGGACGGCAGCTG
TCCCACGCCATCTCTGTGATCTGCGTGGCCGTGTGGTGCATCAACATCGGCCACTTCGCC
GACCCGGCCACGGTGGCTCCTGGCTGCGTGGCGCTGTCTACTACTTCAAGATCGCCGTG
GCCCTGGCGGTGGCGCCATCCCCGAGGGCCTCCCGGCTGTCATCACTACATGCCTGGCA
CTGGGCACGCGGCGCATGGCACGCAAGAACGCCATCGTGCGAAGCCTGCCGTCCGTGGAG
ACCCTGGGCTGCACCTCAGTCATCTGCTCCGACAAGACGGGCACGCTCACCACCAATCAG
ATGTCTGTCTGCCGATGTTCTGTGGTAGCCGAGGCCGATGCGGGCTCCTGCCTTTTGCAC
GAGTTCACCATCTCGGTACCACGTATACCCCGAGGGCGAAGTGCAGGAGGGGATCAG
CCTGTGCGCTGCGGCCAGTTCGACGGGCTGGTGGAGCTGGCGACCATCTGCGCCCTGTGC
AACGACTCGGCTCTGGACTACAACGAGGCAAGGGTGTGTATGAGAAGTGGGAGAGGCC
ACGGAGACAGCTCTGACTTGCCCTGGTGGAGAAGATGAACGTGTTTCGACACCGACCTGCAG
GCTCTGTCCCAGGTGGAGCGAGCTGGCGCCTGTAAACAGGTCATCAAGCAGCTGATGCGG
AAGGAGTTCACCCTGGAGTTCTCCCGAGACCGGAAATCCATGTCCGTGTAAGTGCACGCCC
ACCCGCCCTCACCTACTGGCCAGGGCAGCAAGATGTTTGTGAAGGGGGCTCCTGAGAGT
GTGATCGAGCGCTGTAGCTCAGTCCGCGTGGGGAGCCGCACAGCACCCCTGACCCCAAC
TCCAGGGAGCAGATCCTGGCAAAGATCCGGGATTGGGGCTCAGGCTCAGACACGCTGCGC
TGCTGGCACTGGCCACCCGGGACGCGCCCAAGGAAGGAGGACATGGAGCTGGACGAC

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TGCAGCAAGTTTGTGCAGTACGAGACGGACCTGACCTTCGTGGGCTGCGTAGGCATGCTG  
 GACCCGCCGCGACCTGAGGTGGCTGCCTGCATCACACGCTGCTACCAGGCGGGCATCCGC  
 GTGGTCATGATCACGGGGGATAACAAAGGCACTGCCGTGGCCATCTGCCGCAAGCTTGGC  
 ATCTTTGGGGACACGGAAGACGTGGCGGGCAAGGCCTACACGGGCCGCGAGTTTGATGAC  
 CTCAGCCCCGAGCAGCAGCGCCAGGCCTGCCGCACCGCCCGCTGCTTCGCCCGGTGGAG  
 CCCGCACACAAGTCCCGCATCGTGGAGAACCTGCAGTCCCTTAAACGAGATCACTGCTATG  
 ACTGGCGATGGAGTGAACGACGCACCAGCCCTGAAGAAAGCAGAGATCGGCATCGCCATG  
 GGCTCAGGCACGGCCGTGGCCAAGTCGGCGGCAGAGATGGTGTGCTGTCAGATGACAACTTT  
 GCCTCCATCGTGGCTGCGGTGGAGGAGGCCGGCCATCTACAGCAACATGAAGCAATTC  
 ATCCGCTACCTCATCTCCTCCAATGTTGGCGAGGTCGTCTGCATCTTCTCACGGCAATT  
 CTGGGCTGCCGAAGCCCTGATCCCTGTGCAGCTGCTCTGGGTGAACCTGGTGACAGAC  
 GGCCTACCTGCCACGGCTCTGGGCTTCAACCCGCCAGACCTGGACATCATGGAGAAGCTG  
 CCCCAGAGCCCCGAGAAGCCCTCATCAGTGGCTGGCTCTTCTCCGATACCTGGCTATC  
 GGAGTGTACGTAGGCCTGGCCACAGTGGCTGCCGCCACCTGGTGGTTTGTGTATGACGCC  
 GAGGGACCTCACATCAACTTCTACCAGTGAGGAACTTCTGAAGTGCTCCGAAGACAAC  
 CCGCTCTTTGCCGCATCGACTGTGAGGTTCGAGTCACGCTTCCCCACCACCATGGCC  
 TTGTCCGTGCTCGTGACCATTGAAATGTGCAATGCCCTCAACAGCGTCTCGGAGAACCAG  
 TCGCTGTGCGGATGCCGCCCTGGATGAACCCCTGGTGTGTTGGTGGTGTGGCCATGTCC  
 ATGGCCCTGCACTTCTCATCTGCTCGTGCCGCCCTGCCTCTCATTTCAGGTGACC  
 CCACTGAGCGGGCGCCAGTGGTGGTGGTGTCCAGATATCTCTGCTGTATCTCTGCTG  
 GATGAGGCCCTCAAGTACCTGTCCCGGAACCACATGCACGAAGAAATGAGCCAGAAGTGA

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_005173

**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).

**OTI Annotation:**

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_005173.2](#), [NP\\_005164.2](#)

**RefSeq Size:**

4698 bp

**RefSeq ORF:**

3000 bp

**Locus ID:**

489

|                          |  |
|--------------------------|--|
| <b>UniProt ID:</b>       | <u>Q93084</u>  |
| <b>Cytogenetics:</b>     | 17p13.2  |
| <b>Domains:</b>          | E1-E2_ATPase, Cation_ATPase_N, Hydrolase, Cation_ATPase_C  |
| <b>Protein Families:</b> | Druggable Genome, Transmembrane  |
| <b>Protein Pathways:</b> | Alzheimer's disease, Calcium signaling pathway   |
| <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 calcium sequestration associated with muscular excitation and contraction. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) encodes isoform a.</p> |