

Product datasheet for **SC309422**

SERCA3 (ATP2A3) (NM_174954) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: SERCA3 (ATP2A3) (NM_174954) Human Untagged Clone
Tag: Tag Free
Symbol: ATP2A3
Synonyms: SERCA3
Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM_174954, the custom clone sequence may differ by one or more nucleotides

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ATGGAGGCGGCGCATCTGCTCCCGGCCGCGACGTGCTGCGCCACTTCTCGGTGACAGCC
GAGGGCGGCTGAGCCCGGCGCAGGTGACCGGCGCGGGAGCGCTACGGCCCAACGAG
CTCCCGAGTGAGGAAGGGAAGTCCCTGTGGGAGCTGGTGTGGAACAGTTTGAGGACCTC
CTGGTGCATCCTGCTGCTGGCTGCCCTTGTCTCCTTTGCTCCTGGCCTGGTTCGAGGAG
GGCGAGGAGACCACGACCGCCTTCGTGGAGCCCTGGTCATCATGCTGATCCTCGTGGCC
AACGCCATTGTGGCGTGTGGCAGGAACCAACCCGAGAGTGCCATCGAGGCCCTGAAG
GAGTATGAGCCTGAGATGGGCAAGGTGATCCGCTCGGACCGCAAGGGCGTGCAGAGGATC
CGTGCCCGGGACATCGTCCCAGGGGACATTGTAGAAGTGGCAGTGGGGGACAAAGTGCCT
GCTGACCTCCGCCTCATCGAGATCAAGTCCACCACGCTGCGAGTGGACCAAGTCCATCCTG
ACGGGTGAATCTGTGTCCGTGACCAAGCACACAGAGGCCATCCCAGACCCAGAGCTGTG
AACCAGGACAAGAAGAACATGCTGTTTTCTGGCACCAATATCACATCGGGCAAAGCGGTG
GGTGTGGCCGTGGCCACCGGCCTGCACACGGAGCTGGGCAAGATCCGGAGCCAGATGGCG
GCAGTCGAGCCCGAGCGGACCGCCTGCAGCGCAAGCTGGACGAGTTTGGACGGCAGCTG
TCCCACGCCATCTCTGTGATCTGCGTGGCCGTGTGGTTCATCAACATCGGCCACTTCGCC
GACCCGGCCACGGTGGCTCCTGGCTGCGTGGCGCTGTCTACTACTTCAAGATCGCCGTG
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CCTGTGCGCTGCGGCCAGTTCGACGGGCTGGTGGAGCTGGCGACCATCTGCGCCCTGTGC
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GCTCTGTCCCGGTGGAGCGAGCTGGCGCCTGTAACACGGTCATCAAGCAGCTGATGCGG
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GTGATCGAGCGCTGTAGCTCAGTCCGCGTGGGGAGCCGCACAGCACCCCTGACCCCAAC
TCCAGGGAGCAGATCCTGGCAAAGATCCGGGATTGGGGCTCAGGCTCAGACACGCTGCGC
TGCTGGCACTGGCCACCCGGGACGCGCCCAAGGAAGGAGGACATGGAGCTGGACGAC

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TGCAGCAAGTTTGTGCAGTACGAGACGGACCTGACCTTCGTGGGCTGCGTAGGCATGCTG
 GACCCGCCGCGACCTGAGGTGGCTGCCTGCATCACACGCTGCTACCAGGCGGGCATCCGC
 GTGGTCATGATCACGGGGGATAACAAAGGCACTGCCGTGGCCATCTGCCGACGGCTTGGC
 ATCTTTGGGGACACGGAAGAGCTGGCGGGCAAGGCCTACACGGGCGCGAGTTTGATGAC
 CTCAGCCCCGAGCAGCAGCGCCAGGCCTGCCGCACCGCCCGCTGCTTCGCCCGCTGGAG
 CCCGCACACAAGTCCCGCATCGTGGAGAACCTGCAGTCCTTTAAACGAGATCACTGCTATG
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 GGCTCAGGCACGGCCGTGGCCAAGTCGGCGGCAGAGATGGTGTGTCAGATGACAACCTT
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 GGCCTACCTGCCACGGCTCTGGGCTTCAACCCGCCAGACCTGGACATCATGGAGAAGCTG
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 CCGCTCTTTGCCGCATCGACTGTGAGGTGTCGAGTCACGCTTCCCCACCACCATGGCC
 TTGTCCGTGCTCGTGACCATTGAAATGTGCAATGCCCTCAACAGCGTCTCGGAGAACCAG
 TCGCTGTGCGGATGCCGCCCTGGATGAACCCCTGGTGTGTTGGTGTGGCCATGTCC
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 CCACTGAGCGGGCGCCAGTGGTGGTGGTGTCCAGATATCTCTGCTGTATCTCTGCTG
 GATGAGGCCCTCAAGTACCTGTCCCGGAACCACATGCACGCTGTCTTTATCCAGGCCTT
 CTCAGGACAGTCTCGCAGCCTGGAGTAGGCAGCCGCTGACCACCTTTGGACCCAGAC
 CACACCGGGCCAGGGACACAGCATCGTCTCGTGTGAGAGCTGCTCAGAGAGGGAGGAA
 GCAGGGAAGAAATGA

- Restriction Sites:** Please inquire
- ACCN:** NM_174954
- 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_174954.1](#), [NP_777614.1](#)
- RefSeq Size:** 4844 bp

RefSeq ORF:	3135 bp
Locus ID:	489
UniProt ID:	Q93084
Cytogenetics:	17p13.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Alzheimer's disease, Calcium signaling pathway
Gene Summary:	<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 (4) includes two additional exons in the 3' coding region resulting in a frameshift, compared to variant 1. Variant 4 encodes isoform d, which is longer and has a distinct C-terminus compared to isoform a.</p>