

Product datasheet for RC215756

SERCA3 (ATP2A3) (NM_174958) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SERCA3 (ATP2A3) (NM_174958) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATP2A3
Synonyms:	SERCA3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC215756 representing NM_174958 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGGGCGGCATCTGCTCCCGGCCCGGACGTGCTGCGCCACTTCTCGGTGACAGCCGAGGGCGGCC
TGAGCCCGGCGCAGGTGACCGGGCGCGGGAGCGCTACGGCCCCAACGAGCTCCCGAGTGAGGAAGGGAA
GTCCCTGTGGGAGCTGGTCTGGAACAGTTTGGAGACCTCTGGTGCGCATCTCTGCTGCTGGCTGCCCTT
GTCTCCTTTGTCCTGGCCTGGTTTCGAGGAGGGCGAGGAGACCACGACCGCCTTCTGTGAGCCCTGGTCA
TCATGCTGATCCTCGTGGCCAACGCCATTGTGGGCGTGTGGCAGGAACGCAACGCCGAGAGTGCCATCGA
GGCCCTGAAGGAGTATGAGCCTGAGATGGGCAAGGTGATCCGCTCGGACCGCAAGGGCGTGCAGAGGATC
CGTGCCCGGGACATCGTCCCAGGGGACATTGTAGAAGTGGCAGTGGGGGACAAAGTGCCTGCTGACCTCC
GCCTCATCGAGATCAAGTCCACCACGCTGCGAGTGGACCAGTCCATCCTGACGGGTGAATCTGTGTCCGT
GACCAAGCACACAGAGGCCATCCCAGACCCAGAGCTGTGAACCAGGACAAGAAGAATGCTGTTTTCT
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AGATCCGGAGCCAGATGGCGGCAGTGCAGCCCGAGCGGACCGCTGCAGCGCAAGCTGGACGAGTTTGG
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GACCCGGCCACGGTGGCTCCTGGCTGCGTGGCGTGTCTACTACTTCAAGATCGCCGTGGCCCTGGCGG
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ACGCAAGAAGCCATCGTGCAAGCCTGCCGTCCGTGGAGACCCTGGGCTGCACCTCAGTCATCTGCTCC
GACAAGACGGGCAGCTCACCACCAATCAGATGTCTGTCTGCCGATGTTCTGTGGTAGCCGAGGCCGATG
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TGAAGGGGGCTCCTGAGAGTGTGATCGAGCGCTGTAGCTCAGTCCGCGTGGGGAGCCGCACAGCACCCCT
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 TCTCGCAGGCTGGAGTAGGCAGCCGCTGACCACCTCTTGGACCCAGACCACACCGGTTGGCCTCTT
 GAAGAAA

ACGCGTACGCGGGCCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215756 representing NM_174958
 Red=Cloning site Green=Tags(s)

MEAAHLLPAADVLRHFSVTAEGGLSPAQVTGARERYGNELPSEEGKSLWELVLEQFEDLLVRILLAL
 VSFVLAWFEEGETTTAFVEPLVIMLILVANAIIVGWQERNAESAIEALKEYEPEMGKVIIRSDRKGVQRI
 RARDIVPGDIVEVAVGDKVPADLRLIEIKSTTLRVDQSILTGESVSVTKHTEAIPDPRAVNQDKKNMLFS
 GTNITSGKAVGVAVATGLHTELKIRSQMAAVEPERTPLQRKLDEFGRQLSHAISVICVAVVWINIGHFA
 DPAHGGSWLRGAVYYFKIAVALAVAAIPEGLPAVITTTCLALGTRRMARKNAIVRSLPSVETLGCSTVICS
 DKTGTLTTNQMSVCRMFVVAEADAGSCLLHEFTISGTTYTPEGEVROGDQPVRCGQFDGLVELATICALC
 NDSALDYNEAKGVYKVEATETAL TCLVEKMNVDLQALSRVERAGACNTVIKQLMRKEFTLEFSRD
 RKSMSVYCTPTRPHPTGQGSKMFVKGAPESVIERCSSVRVGSRTAPLTPTSREQILAKIRDWGSGSDTLR
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 TAVAICRRLGIFGDTEVAGKAYTGREFDDL SPEQQRQACRTARCFARVEPAHKSRIVENLQSFNEITAM
 TGDGVNDAPALKAEIGIAMSGTAVAKSAAEMVL SDDNFASIVAAVEEGRAIYSNMKQFIRYLISSNVG
 EVVICIFLTAILGLPEALIPVQLLWVNLVTDGLPATALGFNPPDL DIMEKLPRSPREALISGWLFFRYLAI
 GVVYGLATVAAATWWFVYDAEGPHINFYQLRNFLKCEDNPLFAGIDCEVFESRFPTTMALSVLVTIEMC
 NALNSVSENQSLLRMPPWNPWLLVAVAMSMALHFLILLVPPLPLIFQVTPLSGRQWVVVLQISLPVILL
 DEALKYL SRNHMHACLYPGLLRTVSQAWSRQPLTTSWTPDHTGLASLKK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

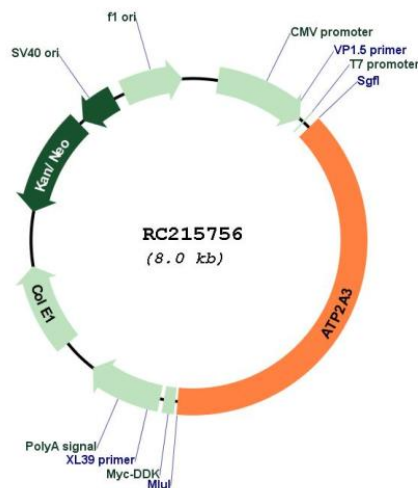
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_174958

ORF Size:

3087 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:	<ol style="list-style-type: none">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_174958.3
RefSeq Size:	4246 bp
RefSeq ORF:	3090 bp
Locus ID:	489
UniProt ID:	Q93084
Cytogenetics:	17p13.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Alzheimer's disease, Calcium signaling pathway
MW:	112.5 kDa
Gene Summary:	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]