

Product datasheet for **RG220052**

SERCA3 (ATP2A3) (NM_174954) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SERCA3 (ATP2A3) (NM_174954) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ATP2A3
Synonyms: SERCA3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG220052 representing NM_174954
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGGCGGCGCATCTGCTCCCGGCCGCCGACGTGCTGCGCCACTTCTCGGTGACAGCCGAGGGCGGCC
 TGAGCCCCGGCGCAGGTGACCGGCGCGGGGAGCGCTACGGCCCCAACGAGCTCCCGAGTGAGGAAGGGAA
 GTCCTGTGGGAGCTGGTCTGGAACAGTTTGGGACCTCCTGGTGCGCATCCTGCTGCTGGCTGCCCTT
 GTCTCCTTTGCTCCTGGCCTGGTTTCGAGGAGGGCGAGGAGACCACGACCGCCTTCGTGGAGCCCTGGTCA
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 GGCCCTGAAGGAGTATGAGCCTGAGATGGCAAGGTGATCCGCTCGGACCGCAAGGGCGTGACAGAGGATC
 CGTGCCCGGGACATCGTCCCAGGGGACATTGTAGAAGTGGCAGTGGGGGACAAAGTGCCTGCTGACCTCC
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CGGAAATCCATGTCCGTGTACTGCACGCCACCCGCCCTCACCTACTGGCCAGGGCAGCAAGATGTTTG
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CCAGGTGACCCCACTGAGCGGGCCAGTGGGTGGTGGTCTCCAGATATCTCTGCTGTATCTCTGCTG
GATGAGGCCCTCAAGTACCTGTCCCGAACCACATGCACGCTGTCTTATCCAGGCTTCTCAGGACAG
TCTCGCAGGCTGGAGTAGGCAGCGCTGACCACCTCTTGACCCAGACCACCCGGGGCCAGGGACAC
AGCATCGTCTCGCTGTACAGCTGCTCAGAGAGGGAGGAAGCAGGGAAGAAA
    
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG220052 representing NM_174954
 Red=Cloning site Green=Tags(s)

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MEAAHLLPAADVLRHFSVTAEGGLSPAQVTGARERYGNELPSEEGKSLWELVLEQFEDLLVRILLAL
VSFVLAWFEEGETTTAFVEPLVIMLILVANAIIVGVWQERNAESAIEALKEYEPEMGKVIKSDRKGVQRI
RARDIVPGDIVEVAVGDKVPADLRLIEIKSTTLRVDQSILTGESVSVTKHTEAIPDPRAVNQDKNMLFS
GTNITSGKAVGVAVATGLHTELKIRSQMAAVEPERTPLQRKLDEFGRQLSHAISVICVAVVWINIGHFA
DPAHGGSWLRGAVYYFKIAVALAVAAIPEGLPAVITTCALGTRRMARKNAIVRSLPSVETLGCSTVICS
DKTGTLTNNQMSVCRMFVVAEADAGSCLLHEFTISGTTYTPEGEVROGDQPVRCGQFDGLVELATICALC
NDSALDYNEAKGVYKVEATETAL TCLVEKMNVDLQALSRVERAGACNTVIKQLMRKEFTLEFSRD
RKSMSVYCTPTRPHPTGQGSKMFVKGAPESVIERCSSVRVGSRTAPLTPTSREQILAKIRDWGSGSDTLR
CLALATRDAPPRKEDMELDDCSKFVQYETDLTFVGCVMGLDPPRPEVAACITRCYQAGIRVVMITGDNKG
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TGDGVNDAPALKAEIGIAMSGTAVAKSAAEMVL SDDNFASIVAAVEEGRAIYSNMKQFIRYLISSNVG
EVVCFILTAILGLPEALIPVQLLWVNLVDGLPATALGFNPPDL DIMEKLPRSPREALISGWLFFRYLAI
GVYVGLATVAAATWWFVYDAEGPHINFYQLRNFLKCEDNPLFAGIDCEVFESRFPTTMALSVLVTIEMC
NALNSVSENQSLLRMPWPWNPWLLVAVAMSMALHFLILLVPPLPLIFQVTPLSGRQWVVVLQISLPVILL
DEALKYLSRNHMHACLYPGLLRTVSQAWSRQPLTTSWTPDHTGARDTASSRCQSCSEREEAGKK
    
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TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

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_174954.3
RefSeq Size:	4885 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:	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]