

Product datasheet for MR211414

Atp2a3 (NM_001163336) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atp2a3 (NM_001163336) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Atp2a3
Synonyms: Serca3; SERCA3b
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR211414 representing NM_001163336
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGAGGCGCACCTGCTCTCCGCTGCCGACGTGCTGCGTCGCTTCTCGGTGACAGCCGAGGGCGCT
 TGAGCCTGGAGCAGGTGACCGACGCGGGAGCGTTACGGCCCCAACGAGCTCCCAGCCAGGAAGGGAA
 ATCCCTGTGGGAGCTGGTGGTGGAGCAGTTTGGAGACCTTTGGTGCGCATCCTGCTGCTGCCAGCTCTG
 GTTTCCTTTGCCTGGCCTGGTTTCGAGGAGGGTGAGGAGACCACAACGGCCTTCGTGGAGCCCTGGTCA
 TCATGCTAATTCTCGTGGCCAATGCGATCGTGGGAGTGTGGCAGGAACGCAACGCAGAGAGTGCAATTGA
 GGCCTTGAAGGAGTATGAGCCTGAGATGGGTAAGGTGATCCGGTCTGACCGCAAGGGTGTACAGAGGATC
 CGAGCCAGGGACATCGTCCCTGGGGACATTGTGGAAGTGGCAGTGGGAGACAAGGTACCCGCTGACCTCC
 GTCTCATCGAGATCAAGTCCACCACACTTCGAGTGGACCAGTCCATCCTGACAGGGGAATCCGTGTCTGT
 GACGAAGCACACAGATGCCATTCAGACCCCGAGCCGTGAACCAGGACAAGAAGAATGCTATTTTCT
 GGCACCAATATTGCATCAGGCAAAGCCCTGGGTGTGGCTGTGGCTACAGGCCCTGCAGACAGAGCTGGGA
 AGATTCGGAGCCAGATGGCGGCTGTGGAGCCTGAGCGGACGCCATTGCAGCGCAAGCTGGATGAATTTGG
 GAGGCAGCTGTCCATGCCATCTGTGATCTGTGTGGCTGTGTGGGTCAACAACATCGGCCACTTTGCT
 GACCCGGCCACGGTGGATCCTGGCTCCGTGGTGCAGTCTACTACTTCAAGATCGCTGTGGCCCTGGCTG
 TGGCTGTATCCCGAGGGTCTCCAGCAGTCACTACATGCCTGGCCCTGGGCACAAGACGTATGGC
 ACGTAAGAATGCCATTGTGCGGAGCCTGCCTTCTGTGGAGACGCTGGGCTGCACCTCGGTGATCTGCTCT
 GACAAGACGGGGACGCTCACCACCAATCAGATGTCTGTCTGCAGGATGTTCTGTGGTGGTGAAGCAGAGG
 CAGGCACCTGTCGTTTGCATGAATTCACATTTCCGGTACCACGTACACCCAGAGGGCGAAGTGAAGCA
 AGGGGAGCAGCCTGTGCGCTGTGGCAGTTTGTGGGCTAGTGGAGCTCGCCACCATCTGTGCCCTCTGC
 AATGATTCTGCGCTGGACTACAATGAGGCCAAGGGTGTGTATGAGAAGGTAGGAGAGGCCACAGAGACCG
 CCCTGACTTGCCTGGTAGAGAAGATGAATGTGTTTACACAGACCTGAAAGGACTGTCCGGGTGGAGCG
 TGCTGGCGCCTGCAACTCAGTCATCAAGCAACTCATGCGAAAAGAGTTTACCCTGGAGTTCTCCCGGGAC
 CGGAAGTCTATGTCGGTGTACTGCACACCTACTCGTGCTGACCCCAAGGTCCAGGGCAGCAAGATGTTTG



TGAAGGGAGCTCCTGAGAGTGAATTGAGCGCTGTAGCTCAGTCCGAGTGGGCAGCCGAACAGCACCCCT
 GAGCACCCTCCAGAGAGCATATCCTGGCCAAGATCCGGGACTGGGGCTCAGGCTTGACACACTGCGC
 TGCTTAGCCTTGCCACCAGGGACACACCCCAAGGAAGGAGGACATGCATCTAGATGACTGCAGCCGGT
 TTGTACAGTACGAGACAGACCTGACCTTCGTGGGCTGCGTGGGCATGTTAGACCCACCGAGACCAGAGGT
 GGCTGCTTGTATCACACGCTGTTCCCGGGCTGGCATTGAGTGGTCATGATCACAGGGGACAACAAAGGG
 ACAGCTGTGGCCATCTGCCGCCGACTTGGCATCTTTGGGGACACGGAGGATGTGTTGGCCAAAGCCCTACA
 CCGGCGGTGAGTTTGTGACCTCAGCCAGAGCAGCAGCCAGGCTTGTGCGACTGCCCGGTGCTTTGCG
 CCGAGTGGAAACCGCACATAAGTCTCGAATCGTGGAGAACCTACAGTCTTTAATGAGATCACTGCCATG
 ACTGGCGATGGGGTGAATGATGCACCAGCCCTGAAGAAGGCAGAGATCGGCATCGCCATGGGCTCAGGCA
 CTGCTGTGGCCAAGTCAAGCAGAGATGGTGTGCTCCGATGACAACCTTGCCTCCATTGTGGTGCAGT
 AGAAGAGGGCAGGGCCATCTACAACAACATGAAGCAGTTCATCCGCTACCTCATCTCCTCAATGTTGGC
 GAGTTGTCTGCATCTTCTCACAGCAATTCTGGGCTGCCCGAAGCTCTGATCCCTGTGCAGTGTCTCT
 GGGTGAACCTGGTAACAGATGGTTACCGGCCACAGCCCTGGCTCAACCCACCAGATCTGGATATCAT
 GGAGAAGCCGCTCGGAATCCCGTGAGGCCCTCATCAGTGGCTGGCTTTTTTCCGCTATTTGGCTATT
 GGAGTGTATGTAGCCTGGCTACAGTGGCTGCCGCCACCTGGTGGTTCCGTATGACACCGAGGGACCTC
 AAGTCACCTTCTATCAGCTGAGGAACCTTCTGAAGTGTCTGAAGACAATCCACTGTTTGCCTGGCATTGA
 CTGCAAGGTTTTTGTGACGCTTCCCCACAACCATGGCCTTATCTGTGCTTGTGACCATTGAAATGTGC
 AACGCCCTCAACAGCGTCTCTGAGAACCAGTCACTGCTGCGCATGCCACCTGGCTGAACCTTGGCTGC
 TGGGGGCTGTGGTCATGTCCATGGCTCTGCATTTCTTATCCTCCTGGTGCCACCTCTGCCTCTCATTTT
 TCAGGTGACCCCACTGAGTGGTCCGAGTGGGGGTGGTGTTCAGATGTCTCTGCCTGTACCTCTGCTC
 GATGAGGCCCTCAAGTATCTGTCCAGGAATCACATGGATGAAAAAAGGACCTGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211414 representing NM_001163336
 Red=Cloning site Green=Tags(s)

MEEAHLLSAADVLRFRSVTAEGGLSLEQVTDARERYGNELPTEEGKSLWELVVEQFEDLLVRILLAL
 VSFVLAWFEEGETTTAFVEPLVIMLILVANAIIVGWQERNAESAIEALKEYEPEMGKVIKSDRKGVQRI
 RARDIVPGDIVEVAVGDKVPADLRLEIKSTTLRVDQSILTGESVSVTKHTDAIPDPRAVNQDKKNMLFS
 GTNIASGKALGVAVATGLQTELGKIRSQMAAVEPERTPLQRKLEDFGRQLSHAISVICVAVWVINIGHFA
 DPAHGGSWLRGAVYYFKIAVALAVAAIPEGLPAVITTCALGTRRMARKNAIVRSLPSVETLGCTSVICS
 DKTGTLTNTQMSVCRMFVVAEAEAGTCRLHEFTISGTTYTPEGEVRQGEQPVRCGQFDGLVELATICALC
 NDSALDYNEAKGVYKVEATETAL TCLVEKMNVDLTKGLSRVERAGACNSVIKQLMRKEFTLEFSRD
 RKSMSVYCTPTRADPKVQGSKMFVKGAPESVIERCSSVRVGSRTAPLSTTSREHILAKIRDWGSQSDTLR
 CLALATRDTPPRKEDMHLDDCSRFVQYETDLTFVGCVMGLDPPRPEVAACITRCSRAGIRVVMITGDNKG
 TAVAICRRLGIFGDTEDVLGKAYTGREFDDL SPEQQRQACRTARCFARVEPAHKSRIVENLQSFNEITAM
 TGDGVNDAPALKKAEIGIAMSGTAVAKSAAEMVLSDDNFASIVAAVEEGRAIYNNMKQFIRYLISSNVG
 EVVICIFLTAIILGLPEALIPVQLLWVNLVTDGLPATALGFNPPDLIMEKPPRNPREALISGWLFFRYLAI
 GVVYGLATVAAATWWFLYDTEGPQVTFYQLRNFLKCEDNPLFAGIDCKVFESRFPPTMALSVLVTIEMC
 NALNSVSENQSLLRMPPWLNWLLGAVVMSMALHFLILLVPPLPLIFQVTPLSGRQWGVVQLMSLPVILL
 DEALKYL SRNHMDEKKDLK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

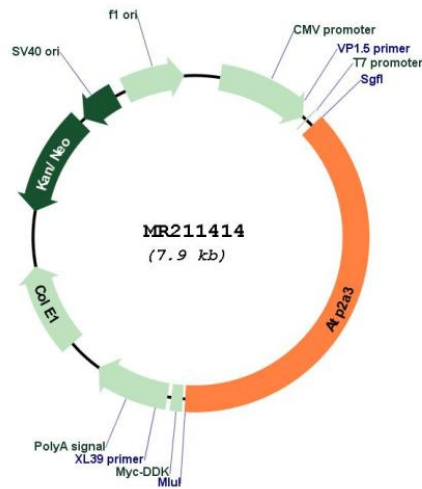
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM_001163336
ORF Size: 2997 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_001163336.1 , NP_001156808.1
RefSeq Size:	4520 bp
RefSeq ORF:	3000 bp
Locus ID:	53313
UniProt ID:	Q64518
Cytogenetics:	11 B4
MW:	110 kDa
Gene Summary:	This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the transport of calcium. Transports calcium ions from the cytosol into the sarcoplasmic/endoplasmic reticulum lumen. Contributes to calcium sequestration involved in muscular excitation/contraction.[UniProtKB/Swiss-Prot Function]