

Product datasheet for **MR226319**

Gaa (NM_008064) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gaa (NM_008064) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gaa
Synonyms:	E430018M07Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR226319 representing NM_008064
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAATATACGGAAGCCCCTCTGTTCGAACTCCGTGGTTGGGCGCTGCACCCCTTATCTCTGACTACAG
 CGGTCATCCTGGGTCATCTCATGCTTCGGGAGTTAATGCTGCTTCCCAAGACCTTCATGAGTCCTTTC
 AGGACTGTGGAAGACGTACCGACCTCACCACCAGGAAGGTTACAAGCCAGGGCCTCTGCACATCCAGGAG
 CAGACTGAACAGCCAAAGAAGCACCCACACAGTGTGATGTGCCCCAGCAGCCGCTTTGACTGTGCC
 CCGACAAAGGCATCTCACAGGAGCAATGCGAGGCCCGCGGCTGCTGCTATGTCCAGCAGGGCAGGTGCT
 GAAGGAGCCGAGATAGGGCAGCCCTGGTGTTCCTCCCTCCAGCTACCCAAGCTACCGTCTAGAGAAC
 CTGAGCTCTACAGAGTCGGGGTACACAGCCACCCTGACCCGTACCAGCCCGACCTTCTCCAAAGGATG
 TGCTGACCTTACAGCTGGAGGTGCTGATGGAGACAGACAGCCGCCTCCACTTCAAGATCAAAGATCTG
 TAGTAAGCGCTACGAAGTCCCCGAGACCCACGTGTGCTGAGCCAGGCACCATCCCCACTTTACAGC
 GTGGAATTCAGAGGAACCCCTTGGAGTGATCGTTCGTAGGAAGCTTGGTGGCCGAGTGTGTGGAACA
 CAACCGTGGCCCCCTGTCTTCGCTGACCAGTTCCTGCAGCTGTCCACTTCCCTGCCCTCCAGACAT
 CACAGGCTGGGGGAACCTCAGCCACTCATGCTCAGCACCGACTGGGCTCGTATCACCTCTGGAAC
 CGGGACACACCACCTCGCAAGTACCAACCTCTACGGGTACATCCTTTCTACCTGGCACTGGAGGACG
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 CCTAACCTGGAGGTCAACGGGCGGGATCCTGGATGTGTATGTGTTCTAGGCCAGAGCCAAAGAGCGTT
 GTGCAACAATACCTGGATGTTGTGGGATACCCCTCATGCCTCCATACTGGGCGCTCGGCTTCCACTCT
 GCGCTGGGCTACTCCTCGACCCCATTTGTCGCCAGTGTAGGAGAACATGACCAGACACATCTCC
 GCTGGATGTGCAATGGAATGACCTGGACTACATGGACGCCCGAAGAGACTTACCTTCAACCAGGACAGC
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 CTGCCATCAGCAGCGCAGGCCCTGCTGGGAGTTACAGGCCCTACGACGAGGGTCTGCGGAGGGGTGTGT
 CATACCAACGAGACTGGGCAGCCGCTGATTGGGAAGGTTTGGCCGGAACCACCGCCTTCCCTGATTTT
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 GCATGTGGCTCGACATGAACGAACCGTCCAACCTCGTTAGAGGCTCTCAGCAGGGCTGCCCAACAATGA
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 AGCCACCAATTCCTCTCCACACTACAACCTCCACAACCTGTACGGCCTCACTGAAGCTATCGCCTCCA
 GCAGGGCCCTGGTCAAGACTCGGGGAACACGACCTTTGTGATCTCCCGCTCAACCTTCTCGGGCCACGG
 CCGGTACGCTGGTCACTGGACAGGGGATGTGCGGAGCTTTGGGAGCATCTTGCATACTCTGTGCCAGAC
 ATCCTGCAGTTCAACCTGCTGGGCGTGCCCTGGTGGGGCGGACATCTGCGGCTTCATAGGAGACACGT
 CAGAAGAGCTGTGTGCGCTGGACCCAGTTGGGGCCTTCTACCCCTTCATGCGGAACCACAATGACCT
 GAATAGCGTGCCTCAGGAGCCGTACAGGTTACAGGAGACGGCGCAGCAGGCCATGAGGAAGGCCTTCGCC
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 CCCGGCCCTCTCTCGGAGTTCCTGAGGATCCAGCACCTGGTCTGTGGACCGCCAGCTCTTGTGGG
 GCGCGCCCTGCTCATCACACTGTGCTTGAGCCTGGGAAAAGTGAAGTACGCGGCTACTTCCCAAGGGC
 ACGTGGTACAACATGCAGGTGGTGTGAGTGGATTCCCTCGGACTCTCCCTTCTCCATCATCGGCTTCAT
 CCTTCAGATCTGCTGTCCAGAGCAAGGGCAGTGGCTGACACTGGAAGCCCACTGGATACCATCAACGT
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 AGAGCCTTGCAGTTCTGGAGCGTGGGCCACACACTGGTCACTTCTCAGCCAAGAACAATACCATTGT
 GAACAAGTTAGTGCCTGTACCAAGGAGGGAGCTGAGCTACAACCTGAGGGAGGTGACCGTCTTGGGAGTG
 GCCACAGCTCTACCCAGTCTTCCAAACGGCATCCCTGTCTCCAATTTACCTACAGCCCTGACAACA
 AGAGCCTGGCCATCCCTGTCTACTGCTGATGGGAGAGCTGTTTCAAATCAGCTGGTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR226319 representing NM_008064
 Red=Cloning site Green=Tags(s)

MNIRKPLCSNSVVGACTLISLTTAVILGHLMLREMLLPQDLHESSSGLWKTYRPHHQEGYKGPLHIQE
 QTEQPKEAPTQCDVPPSSRFDCAPDKGISQEQCEARGCCYVPAGQVLKEPQIGQPWCFFPPSYPSYRLEN
 LSSTESGYTATL TRT SPTFFPKDVL TLQLEVL METDSRLHFKIKDPASKRYEVPLET PRVLSQAPSPLYS
 VEFSEEPFGVIVRRKLGGRVLLNTTVAPLFFADQFLQLSTSLPSQHITGLGEHL SPLMLSTDWARITLWN
 RDTPPSQGTNLYGSHPFYLALEDGGLAHGVFLLNSNAMDVILQSPAL TWRSTGGILDVYVFLGPEPKSV
 VQQYLDVVGYPFMPYWG LGFHL CRWGSSTAI VRQVVENMTRTHFPLDVQWNDLDYMDARRDFTFNQDS
 FADFPDMVRELHQGRRYMMIVDPAISSAGPAGSYRYPYDEGLRRGVFITNETGQPLIGKVP GTTAFPDF
 TNPETLDWWQDMYSEFHAQV PFDGMWLD MNEPSNFVRGSQQGCPNNELENPPYVPGVVGILQAATICAS
 SHQFLSTHYNLHNL YGLTEAIASSRALVKTRGTRPFVISRSTFSGHGRYAGHWTGDVRSSWEHLAYSVPD
 ILQFNLLGVPLVGADICGFIGDTSEELCVRWTLGAFYPFMRNHNDLNSVPQEPYRFSETAQAMRKAF
 LRYALLPYLYTLF HRAHVRGDTVARPLFLEFPEDPSTWSVDRQLLWGPALLITPVL EPGKTEVTGYFPKG
 TWYNMQVVSVD SLGTLPS PSSASSFRSAVQSKGQWL TLEAPLDTINVHLREGYI IPLQGSLTTTESRKQ
 PMALAVALTASGEADGELFWDDGESLAVLERGAYTLVTFSAKNNTIVNKLVRVTKEGAELQLREVTVLGV
 ATAPTQVLSNGIPVSNFTYSPDNKSLAIPVSLLMGELFQISWS

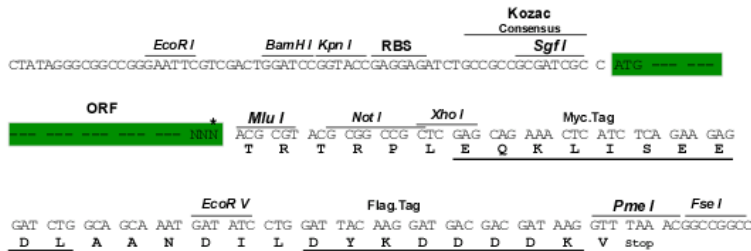
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1929_a12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



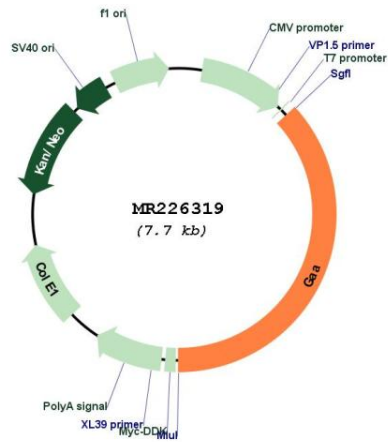
* The last codon before the Stop codon of the ORF

ACCN: NM_008064

ORF Size: 2859 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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_008064.2
RefSeq Size:	3756 bp
RefSeq ORF:	2862 bp
Locus ID:	14387
UniProt ID:	P70699
Cytogenetics:	11 83.35 cM
MW:	106.7 kDa
Gene Summary:	<p>This gene encodes a lysosomal acid glucosidase that is involved in the degradation of glycogen. The encoded preproprotein undergoes proteolytic processing to generate a mature enzyme that cleaves alpha-1-4 and alpha-1-6 glycosidic bonds of glycogen, maltose and intermediate oligosaccharides within the lysosome. Mice lacking the encoded protein exhibit symptoms similar to human Pompe syndrome such as accumulation of glycogen in cardiac and skeletal muscle lysosomes resulting in reduced mobility and strength. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Nov 2015]</p>

Product images:



Circular map for MR226319