

## Product datasheet for **RR211943**

### **Mgea5 (NM\_131904) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Mgea5 (NM_131904) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mgea5
Synonyms:	Ncoat; O-GLCNACASE; OGA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>RR211943 representing NM\_131904  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTGCAGAAGGAGAGTCAAGCGGCGCTGGAGGAGCGGGAGAGTGAGCGCAACGCCAATCTGCCTCCG  
 TCTCGGGGGCTTCGTTGGAGCCGCTGCGAGCTCCGGCCCCGGAGAAGACAACCCCTCGGGAGCTGGGGC  
 GGCGGCCGGGACCGGGCGGCCGGCGGGGCCCGCAGGTTCTGTGCGGTGTAGTGAAGGGTTTTATGGA  
 AGACCTTGGGTTATGGAGCAGAGAAAAGAGCTCTTTAGAAGGCTTCAGAAATGGGAATTAATACATACT  
 TGTATGCTCCGAAGGATGACTACAAACATAGGATGTTTTGGCGAGAGATGATTCAGTGAAGAAGCTGA  
 GCAACTTATGACTCTCATCTGCTGCACGAGAATATGAGATAGAATTCATCTATGCTATTTCTCCAGGA  
 TTAGATACACTTTTTCTAACCCAAAGGAAGTATCAACATTGAAACGCAAATGGACCAGGTCTCCAGT  
 TTGGGTGCAGGTCATTTGCTTTGCTTTTGACGATATTGATCATAACATGTGTGCAGCAGACAAAGAAGT  
 GTTCAGTTCTTTGCACATGCACAAGTTCCATCACAAATGAAATCTATCAGTACCTGGGAGAGCCGGAA  
 ACCTTCTCTTGTCCACAGAATACTGCGGCACTTTCTGTTATCCAAGTGTATCTCAGTCTCCTTACT  
 TGAGGACTGTGGGTGAAAAGCTGCTACCTGGAATTGAGGTGCTTTGGACAGGTCCAAAAGTTGTTTCAAA  
 AGAAAATCCAGTAGAATCTATTGAAGAAGTTTCTAAGATCATTAAAGAGAGCCCCAGTGATCTGGGATAAC  
 ATTCATGCTAATGACTATGATCAGAAGAGGCTGTTTTCTGGGTCCCTACAAAGGAAGATCCACAGAGCTCA  
 TCCCACGGTTGAAGGGAGTGCTGACTAATCCAAATTTGGAATTTGAAGCCAATATGTTGCCATCCACAC  
 CCTTGCCACTTGGTACAAGTCAAACATGAACGGAGTGAGGAAGGACGTGGTGATGACTGACAGTGAAGAC  
 AGTACTGTCTCAATACAGATAAAGTTAGAAAATGAAGGCAGTGTGAAGACATTGAGACTGATGTGCTCT  
 ACAGTCCACAGATGGCTTTAAAGCTGGCCTTAACGTGAGTGGCTGCAGGAGTTCGGTGTACCGCATCAGTA  
 CAGCAGTAGACAGGTTGCACACAGTGGAGCTAAGACAAGCGTAGTGGACGGGACTCCCTTGGTTGCAGCA  
 CCTTCTTTAAATGCCACAAGTGTAGTTACAACAGTTTACCAGGAGCCATTATGAGCCAGGGAGCAGCTT  
 TGAGTGGTGAAGCCTCAGCTCTGACCAAGGAAGAAGAAAAGAAACAGCCAGATGAGGAACCCATGGATAT  
 GGTGGTAGAGAAGCAAGAAGAGTCAAGAGCAAGAGTGAACACCAGATACTAAGTGAAGTGTGCGAAGCT  
 AAAATGGCAGAGGAGTTGAAACCAATGGACTGATAAGGAAAGCATAGCCGAGTCAAAAATCCCGAGAGA  
 TGTCTATGCAGGAAGACTGCATTAACGACATCGCTCCTATGCAGACAGACGAGCAAGCAACAAAGAGCA  
 GTTTGTGCCAGGTCCAAATGAAAAACCTTTGTACGCTGCAGAACCAGTACTCTGGAGGATTTACAGTTA  
 CTTGCTGATCTTCTACCTTCTTATGAGCATGGACCCAAAGGAGCACAGATGCTACGGGAGTTCCAGT  
 GGTTCGAGCAACAGTGTGTTGTCAGTGTCAATTGCAAAGGGAAAGACTCTGAAAAAATTTGAAGAATG  
 GCGGTCACGAGCAGCAAGTTTGAAGAAATGTGCGCACTAGTGTGGGGATGTTACCCGGCTCTCCAAC  
 TGTGCCAACAGGACAATCCTTTATGACATGTAATCCTATGTGTGGGATATCAAGAGTATAATGTCTATGG  
 TGAAGTCTTTTGTGAGTGGTTAGGGTGTGCTAGTCAATCTTCCAGCAGTTCCTAATGGAGACCAAGA  
 ACCCTGGGCTTTAGAGGTGGTCTAGCAGGAGAGTTCCAGCGTTTGTGCCAATTGATGGAGCAAATGAT  
 CTCTTTTCCAACCCCCACTGACTCCTACCTCCAAGTTTATACTATCAGACCTTATTTCCCTAAAG  
 ATGAGGCTTCCGTGTACAAGATTTGCAGAGAAAATGTATGATGATGGAGTGGGTTTACCTTTCAAAGTCA  
 GCCTGACCTTATTGGAGACAAGTTAGTAGGAGGACTGCTTCCCTCAGCCTGGATTACTGTTTTGTCTC  
 GAAGATGAAGATGGTATTTGTGGTTATGCCTTAGGCACTGTAGATGTGACCCCTTCATTAAGAAAGTGCA  
 AAATTTCTGGATTCCCTTCATGCAGGAGAAGTATACTAAGCCAATGGAGACAAAGAGCTCTCAGAAGC  
 TGAGAAAATAATGTTGAGTTTCCATGAAGAGCAGGAGGATTACCAGAACTTTCCCTGCCAACCTCCCT  
 TCTCTGATAAAAAATGGATATTCATAAAAAGGTCAGTACCCAAAGTGTGCAAAAAGCATGATGGCTTGC  
 TCCTGTCTTCACTAAAGGCCAATGGCTCCCGGGGGCTTTCTGTGAAGTAAAGACCAGATGATAAAGGAT  
 TCTGGAATTTTACAGCAAGTTAGGCTGTTTTGAAATTGCAAAAATGGAAGGATTTCAAAGGATGTGGT  
 ATACTTGGTCAAGCCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATTAAGTTTAA

Protein Sequence: >RR211943 representing NM\_131904  
 Red=Cloning site Green=Tags(s)

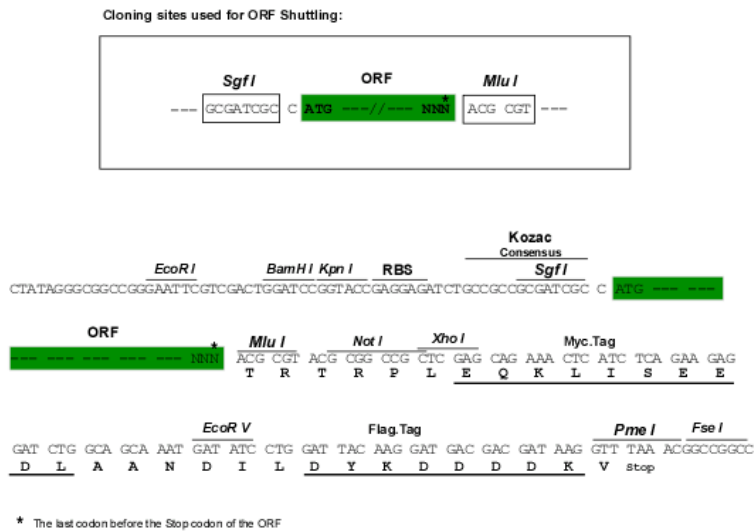
MVQKESQAAL EERESERNANPASVSGASLEPSAAPAGEDNPSGAGAAAGTGAAGGARFLCGVVEGFYG  
 RPWVMEQRKELFRRLQKWELNTYL YAPKDDYKHRMFWREMYSVVEAEQLMTLISAAREYEIEFIYAI  
 SPGLDITFSNPKEVSTLKRKLDQVSQFGCRSFALLFDDIDHNMCAADKEVSSFAHAQVSIITNEYQYL  
 GEPE TFLFCPT EYCGTFCYPSVSQSPYLRTVGEKLLPGIEVLWTGPKVVSKEIPVESIEEVSKI  
 IKRAPVIWDNIHANDYDQKRLFLGPKGRSTELIPRLKGYLTNPNCFEFANYVAIHTLATWYKSNMNG  
 VRKDDVMTDSEDSTVSIQIKLENEGSDEDIETDVL YSPQMAKLALTEWLQEFVPHQYSSRQVAH  
 SGAKT SVVDGTPLVAA PSLNATTVVTTYQEPIMSQGAALSGEPSALTKEEKKQPDEEPM  
 DMVVEKQEES EHKSDNQILTEIVEA KMAEELKPMDDKESIAESKSPMSMQEDCINDI  
 APMTDEQANKEQFVPGPNEKPL YAAEPVTLEDLQL LADLFYLPYEHGPKGAQMLREFQWL  
 RANSSVSVNCKGKDSEKIEEWSRAAKFEEMCALVMGMFTRL SN CANRTILYDMYSYVWDIK  
 SIMSMVKSFVQWLGCRSHSSAQFLIGDQEPWAFRGG LAGEFQRLLPIDGAND LFFQPPPL  
 TPTSKVYTI RPYFPKDEASVYKICREMYDDGVL PFGSQPDLIGDKLVGGLLSLDYCFVL  
 EDEDGICGYALGTVDPFPIKCKISWIPFMQEKYTKPNGDKELSEA EKIMLSFHEEQEVL  
 PETFLANF PSLIKMDIHKKVTDPSVAKSMMACLLSSLKANGSRGAFCEVRPDDKRILEFYSKL  
 GCFEIAKMEGFPKDVV ILGRSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

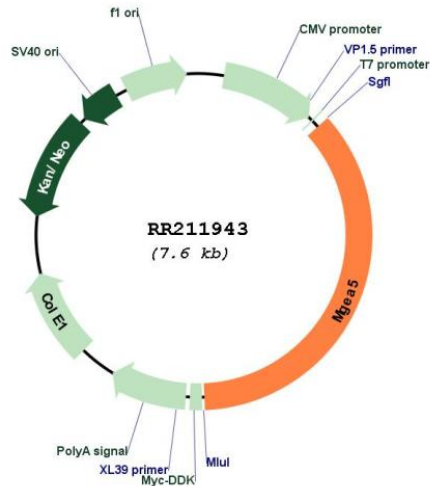
Restriction Sites:

SgfI-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_131904

ORF Size: 2748 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:

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\\_131904.1](#), [NP\\_571979.1](#)

RefSeq Size: 2751 bp

RefSeq ORF: 2751 bp

Locus ID: 154968

UniProt ID: [Q8VIJ5](#)

Cytogenetics: 1q54

**MW:** 102.9 kDa

**Gene Summary:** plays a role in insulin secretion; may be involved in secretion of other glucose regulated hormones [RGD, Feb 2006]