

## Product datasheet for **MG211167**

### **Mgea5 (NM\_023799) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Mgea5 (NM_023799) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mgea5
Synonyms:	2810009A20Rik; 4833427O07Rik; 5830447M11Rik; AA408215; Hy5; mKIAA0679; Ncoat; OGA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG211167 representing NM\_023799  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTGCAGAAGGAGAGCCAGGCGCGCTGGAGGAGCGGGAGAGCGCAACGCCAACCTGCCGCCG  
 CCTCGGGGGCTTCGTTGGAGCAGTCGGTAGCTCCCGCCCCGGAGAAGATAACCCATCGGGAGCCGGGGC  
 TCGCGCGTGGTGGGGCGGCCGGAGGGGCCCGCAGGTTCTGTGCGGTGTCGTGGAAGGTTTTATGGA  
 AGACCTTGGGTTATGGAGCAGAGAAAAGAGCTCTTTAGAAGGCTTCAGAAATGGGAATTAACACATACT  
 TGTATGCTCCAAAAGATGACTACAAACATAGGATGTTTTGGCGAGAGATGATTCAGTGGAGAAGCTGA  
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 CTAGATACACTTTTTCTAACCCCAAGGAAGTATCAACGTTGAAACGCAAATGGACCAGGTCTCTCAGT  
 TTGGGTGCAGGTCGTTTCTTTGCTTTTCGATGATATTGACCATAATATGTGTGCAGCAGACAAAGAGGT  
 GTTCAGTTCTTTTGCACATGCACAAGTTTCCATCACCAATGAAATTTATCAGTACCTGGGAGAGCCAGAA  
 ACCTTCTCTTCTGCCCTACAGAATACTGTGGCACTTTCTGTTATCCAAATGTATCTCAGTCTCCTTACT  
 TGAGGACTGTGGGTGAGAAGCTTCTACCTGGAATTGAGGTGCTTTGGACAGGTCCAAAAGTTGTTTCAAA  
 AGAAATCCAGTGGAAATCTATTGAAGAAGTTTCTAAGATCATTAAAGAGAGCTCCAGTGTCTGGGATAAC  
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 AGTACTGTATCAATACAGATAAAGTTAGAAAATGAAGGCAGTGACGAAGACATTGAGACTGATGTTCTCT  
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 CAGCAGTAGGCAAGTTGCACACAGTGGAGCTAAGACAAGTGTAGTTGATGGGACTCCCTTAGTTGCTGCA  
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 GGTGGTCGAAAAGCAAGAAGAAGCAGAGCACAAGAATGACAACCAGATACTAACTGAGATTGTTGAAGCG  
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 GGCCTCGAGCAAACAGCAGTGTGTCAGTGTCAACTGCAAAGGGAAAGACTCAGAAAAAATAGAAGAATG  
 GCGGTCACGAGCAGCAAGTTTGAAGAGATGTGTGCACTAGTGTGGGGATGTTACCCCGCTTTCCAAC  
 TGTGCCAACAGGACCATCCTTTATGACATGTACTCCTATGTGTGGGACATCAAGAGTATAATGTCTATGG  
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 GAAGATGAAGATGGCATTGTGGTTATGCCTTAGGCACAGTAGATGTGACCCCTTCATTAAGAAAGTGA  
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 TCTCTGATAAAAAATGGATATTCATAAAAAAGTACTGACCCGAGTGTGCCAAAAGCATGATGGCTTGCC  
 TCCTGTCTTCACTGAAGGCCAATGGCTCCCGGGGGCTTTCTGTGAAGTAAAGACCAGATGATAAAGGAT  
 TCTGGAATTTTACAGCAAGTTAGGCTGTTTTGAAATTGCAAAAAATGGAAGGATTTCAAAGGATGTGGTT  
 ATACTTGGTCAAGCCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG211167 representing NM\_023799  
 Red=Cloning site Green=Tags(s)

MVQKESQAALEERESERNANPAAASGASLEQSVAPAGEDNPSGAGAAAVVGAAGGARF LCGVVEGFYGRPWVMEQRKELFRRLQKWELNTYL YAPKDDYKHRMFWREMYSVVEAEQLMTLISAAREYEIEFIYAI SPGLDITFSNPKEVSTLKRKLDQVSQFGCRSFALLFDDIDHNMCAADKEVFSFAHAQV SITNEIYQYLGEPE TFLFCPT EYCGTF CYPNVSQSPYLRTVGEKLLPGIEVLWTGPKVVSKEIPVESIEEVSKI IKRAPVIWDNIHANDYDQKRLFLGPYKGRSTELIPRLKGVLTNPNCFEANYVAIHTLATWYKSNMNGVRKDVVMTDSE DSTVSIQIKLENEGSDEDIETDVL YSPQMALKLALTEWLQEFVPHQYSSRQVAHSGAKTSVVDGTPLVAA PSLNATTVVTTYQEPIMSQGAALSGEPSVLTKEEEKQPDEEPMVMVVEKQEEAEHKNDNQILTEIVEAKMAEELRPMDDKESMAESKSPMSMQEDCIPDVAPMQTDEQTQKEQFVPGPNEKPLYTAEPVTTLEDLQLADLFYLPYEHGPKGAQMLREFQWLRANSSVSVNCKGKDKSEKIEEWSRAAKFEEMCALVMGMFTRL SN CANRTILYDMYSYVWDIKS IMSMVKSFVQWLGCRSHSSAQFLIGDQEPWAFRGG LAGEFQRLLPIDGANDLFFQPPPLTPTSKVYTI RPYFPKDEASVYKICREMYDDGVGFPFQSQPD LIGDKLVGGLLSLDYCFVLEDEDGICGYALGTVDVTPFIKCKISWIPFMQEKYTKPNGDKELSEA EKIMLSFHEEQEVL PETFLANF PSLIKMDIHKKVTDPSVAKSMMACLLSSLKANGSRGAFCEVRPDDKRILEFY SKLGCFEIAKMEGFPKDVV ILGRSL

TRTRPLE - GFP Tag - V

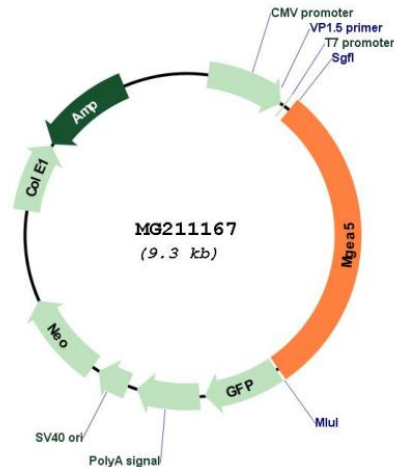
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_023799

**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\\_023799.2](#)

**RefSeq Size:** 4797 bp

**RefSeq ORF:** 2751 bp

**Locus ID:** 76055

**UniProt ID:** [Q9EQQ9](#)

**Cytogenetics:** 19 38.75 cM

**Gene Summary:**

Cleaves GlcNAc but not GalNAc from O-glycosylated proteins. Can use p-nitrophenyl-beta-GlcNAc and 4-methylumbelliferone-GlcNAc as substrates but not p-nitrophenyl-beta-GalNAc or p-nitrophenyl-alpha-GlcNAc (in vitro) (PubMed:16517082). Does not bind acetyl-CoA and does not have histone acetyltransferase activity.[UniProtKB/Swiss-Prot Function]