

## Product datasheet for **MG203699**

### Myg1 (BC023124) Mouse Tagged ORF Clone

#### Product data:

|                           |                                                                            |
|---------------------------|----------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                        |
| Product Name:             | Myg1 (BC023124) Mouse Tagged ORF Clone                                     |
| Tag:                      | TurboGFP                                                                   |
| Symbol:                   | Myg1                                                                       |
| Synonyms:                 | 0610023A07Rik; 2810433J21Rik; 5830429P19Rik; AI325965; Gamm1               |
| Mammalian Cell Selection: | Neomycin                                                                   |
| Vector:                   | pCMV6-AC-GFP (PS100010)                                                    |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                     |
| ORF Nucleotide Sequence:  | >MG203699 representing BC023124<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTCCTCAGGACTTTTACAGAAACCATGAGTTCAGTGTGCCCTGGAAAGCCATGGCAGACCAAGCTGA  
 GCAGTGCAGGACTTGTCTATTTGCACTTCGGACGTAAGCTCCTGGCCAGTTGCTGGGCACTAGTGAAGA  
 GGACAGCGTGGTGGATACCATCTATGACAAGATGTATGAGAACTTTGTGGAAGAGGTGGATGCGGTGGAC  
 AATGGGATCTCTCAGTGGGCAGAGGGGGAGCCTCGGTATGCAATGACCACCACACTGAGTGCCCGGGTTG  
 CTCGGCTTAATCCACCTGGAACCAGCCCAACCAAGACACTGAGGCAGGGTTGAGGCGAGCAATGGACCT  
 GGTACAAGAGGAGTTTCTGCAAAGACTAACTTCTACCAGCACAGCTGGCTGCCAGCCCGGCCTTAGTA  
 GAGGAGGCACTGGCCAGAGATTCAAGGTAGATTCAAGTGGGAAATAGTGGAACTCGAAAAGGTGGAT  
 GCCCTTGGAAAGGAGCATCTATACCACCTAGAATCTGAGCTGTCCCCAAAGTGGCCATTACCTTTGTTAT  
 CTACACTGACCAGGCTGGACAGTGGCGAGTCCAGTGCCTACCAAGGAGCCTCACTCATTCCAAAGCCGG  
 CTACCCCTTGGCCGAGCCATGGAGAGGACTTCGGGATAAGGCCCTGGACCAAGTCAGTGGGATCCCTGGTT  
 GCATCTTCGTCCATGCCAGTGGCTTCATTGGTGGGCACCACACTCGAGAGGGTGCCTGAACATGGCCCG  
 TGCCACCCTTGCCAGCGCCAGCACCTGTGCCTCTTGCAAATGCTGTAGTCAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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**Protein Sequence:** >MG203699 representing BC023124  
 Red=Cloning site Green=Tags(s)

MLLRFTFTETMSSLCPGKPWQTKLSSAGLVYLHFGRKLLAQLLGTSEEDSVVDTIYDKMYENFVEEVDVAVD  
 NGISQWAEGEPRYAMTTTL SARVARLNPTWNQPNQDTEAGFRAMDVLQEEFLQRLNFIYQHSWLPARALV  
 EEALAQRFKVDSSGEIVELAKGGCPWKEHLYHLESELSPKVAITFVIYTDQAGQWRVQCVPKEPHSFQSR  
 LPLPEPWRGLRDKALDQVSGIPGICFVHASGFIGGHTREGALNMRATLAQRPAPVPLANAVVQ

TRTRPLE – GFP Tag – V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** BC023124

**ORF Size:** 825 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [BC023124](#)

**RefSeq Size:** 1334 bp

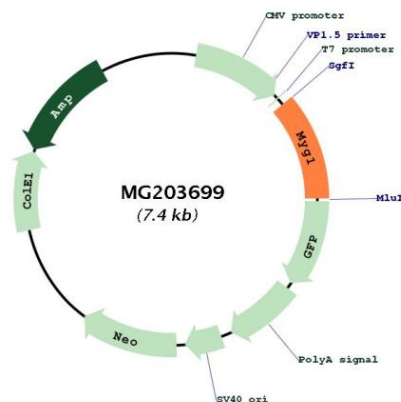
**RefSeq ORF:** 827 bp

**Locus ID:** 60315

**Cytogenetics:** 15 F3

**Gene Summary:** 3'-5' RNA exonuclease which cleaves in situ on specific transcripts in both nucleus and mitochondrion. Involved in regulating spatially segregated organellar RNA processing, acts as a coordinator of nucleo-mitochondrial crosstalk (PubMed:31081026). In nucleolus, processes pre-ribosomal RNA involved in ribosome assembly and alters cytoplasmic translation. In mitochondrial matrix, processes 3'-termini of the mito-ribosomal and messenger RNAs and controls translation of mitochondrial proteins (PubMed:31081026).[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MG203699