

## Product datasheet for **RG206556**

### Myocilin (MYOC) (NM\_000261) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myocilin (MYOC) (NM_000261) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Myocilin
Synonyms:	GLC1A; GPOA; JOAG; JOAG1; TIGR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG206556 representing NM\_000261  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAGGTTCTTCTGTGCACGTTGCTGCAGCTTTGGCCTGAGATGCCAGCTGTCCAGCTGCTGCTTCTGG  
 CCTGCCTGGTGTGGGATGTGGGGCCAGGACAGCTCAGCTCAGGAAGGCCAATGACCAGAGTGGCCGATG  
 CCAGTATACCTTCAGTGTGGCCAGTCCCAATGAATCCAGCTGCCAGAGCAGAGCCAGGCCATGTCACT  
 ATCCATAACTTACAGAGAGACAGCAGCACCCAACGCTTAGACCTGGAGGCCACCAAGCTCGACTCAGCT  
 CCCTGGAGAGCTCCTCCACCAATTGACCTTGGACCAGGCTGCCAGGCCAGGAGACCCAGGAGGGGCT  
 GCAGAGGGAGCTGGGCACCCTGAGGCGGGAGCGGGACCAGCTGGAAACCCAAACCAGAGAGTTGGAGACT  
 GCCTACAGCAACCTCCTCCGAGACAAGTCAGTTCTGGAGGAAGAGAAGAAGCGACTAAGGCAAGAAAATG  
 AGAATCTGGCCAGGAGGTTGAAAGCAGCAGCCAGGAGGTAGCAAGGCTGAGAAGGGGCCAGTGTCCCA  
 GACCCGAGACACTGCTCGGGCTGTGCCACCAGGCTCCAGAGAAGTTTCTACGTGGAATTTGGACACTTTG  
 GCCTTCCAGGAAGTGAAGTCCGAGCTAACTGAAGTTCTGCTTCCCGAATTTTGAAGGAGAGCCCATCTG  
 GCTATCTCAGGAGTGGAGAGGGAGACACCGGATGTGGAGAAGTGTGGTGGATGCGAGACCCCAAGCCACCTACCCCTAC  
 ACCCAGGAGACCAGTGGAGAATCGACACAGTTGGCACGGATGTCCGCCAGGTTTTTGGATGACCTCA  
 TCAGCCAGTTTATGCAGGGCTACCTTCTAAGGTTACATACTGCCTAGGCCACTGGAAAGCACGGGTGC  
 TGTGGTGTACTCGGGGAGCCTCTATTTCCAGGGCGCTGAGTCCAGAACTGTCATAAGATATGAGCTGAAT  
 ACCGAGACAGTGAAGGCTGAGAAGGAAATCCCTGGAGCTGGCTACCACGGACAGTCCCGTATTCTTTGGG  
 GTGGCTACACGGACATTGACTTGGCTGTGGATGAAGCAGGCCTCTGGGTCAATTTACAGCACCGGATGAGG  
 CAAAGGTGCCATTGTCTCTCCAACTGAACCCAGAGAATCTGGAAGTCCGAACCAACCTGGGAGACAAAC  
 ATCCGTAAAGCAGTCAGTCGCAATGCCTTCATCATCTGTGGCACCTTGTACACCGTCAGCAGCTACACCT  
 CAGCAGATGCTACCGTCAACTTTGCTTATGACACAGGCACAGGTATCAGCAAGACCCTGACCATCCCATT  
 CAAGAACCCTATAAGTACAGCAGCATGATTGACTACAACCCCTGGAGAAGAAGCTCTTTGCTGGGAC  
 AACTTGAACATGGTCACTTATGACATCAAGCTCTCCAAGATG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG206556 representing NM\_000261  
 Red=Cloning site Green=Tags(s)

MRFFCARCCSFGPEMPAVQLLLLACLVDVGARTAQLRKANDQSGRCQYTFSVASPNNESSCPEQSQAMSV  
 IHNLQRDSSTQRDLLEATKARLSSLESLHQLTLDQAARPOETQEGLQRELGLRRERDQLETQRELET  
 AYSNLLRDKSVLEEEKRLRQENENLARRLESSSQEVARLRRGQCPQTRDTARAVPPGSREVSTWNLDL  
 AFQELKSELTEVPASRILKESPSGYLRSGEGDTGCGELVWVGEPLTLRTAETITGKYGVWVRDPKPTYPY  
 TQETTWRIDTVGTDVQRQVFEYDLISQFMQGYPSKVHILPRPLESTGAVVYSGSLYFQGAESRTVIRYELN  
 TETVKAKEKEIPGAGYHGQFPYSWGGYTDIDLAVDEAGLWVIYSTDEAKGAIVL SKLNPNLELEQTWETN  
 IRKQSVANAFIICGTLYTVSSYTSADATVNFAYDTGTGISKTLTIPFKNRYKYSSMIDYNPLEKLF  
 FAWDNLNMVTDIKLSKM

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_000261

**ORF Size:** 1512 bp

**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

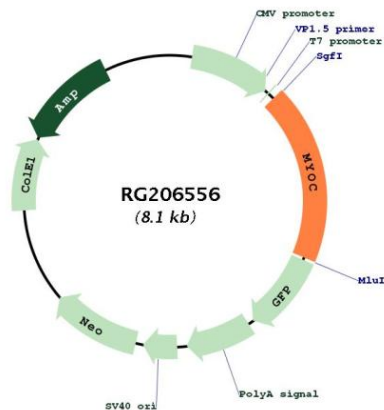
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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\\_000261.2](#)

RefSeq Size:	2061 bp
RefSeq ORF:	1515 bp
Locus ID:	4653
UniProt ID:	<a href="#">Q99972</a>
Cytogenetics:	1q24.3
Protein Families:	Druggable Genome, Secreted Protein
Gene Summary:	MYOC encodes the protein myocilin, which is believed to have a role in cytoskeletal function. MYOC is expressed in many ocular tissues, including the trabecular meshwork, and was revealed to be the trabecular meshwork glucocorticoid-inducible response protein (TIGR). The trabecular meshwork is a specialized eye tissue essential in regulating intraocular pressure, and mutations in MYOC have been identified as the cause of hereditary juvenile-onset open-angle glaucoma. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG206556