

## Product datasheet for **RG212352**

### Myoglobin (MB) (NM\_005368) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Myoglobin (MB) (NM\_005368) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Myoglobin  
**Synonyms:** PVALB  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG212352 representing NM\_005368  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGGCTCAGCGACGGGAATGGCAGTTGGTGTGAACGCTCTGGGGGAAGGTGGAGGCTGACATCCCAG  
 GCCATGGGCAGGAAGTCTCATCAGGCTCTTAAGGGTCAACCCAGAGACTCTGGAGAAGTTTGACAAAGTT  
 CAAGCACCTGAAGTCAGAGGACGAGATGAAGGCGTCTGAGGACTTAAAGAAGCATGGTGCCACCGTGCTC  
 ACCGCCCTGGGTGGCATCTTAAGAAGAAGGGGCATCATGAGGCAGAGATTAAGCCCTGGCACAGTCCG  
 ATGCCACCAAGCAAGATCCCCGTGAAGTACCTGGAGTTCATCTCGGAATGCATCATCCAGTTCTGCA  
 GAGCAAGCATCCCGGGGACTTTGGTGTGATGCCAGGGGGCCATGAACAAGGCCCTGGAGCTGTTCCGG  
 AAGGACATGGCCTCCAACACTACAAGGAGCTGGGCTTCCAGGGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG212352 representing NM\_005368  
 Red=Cloning site Green=Tags(s)

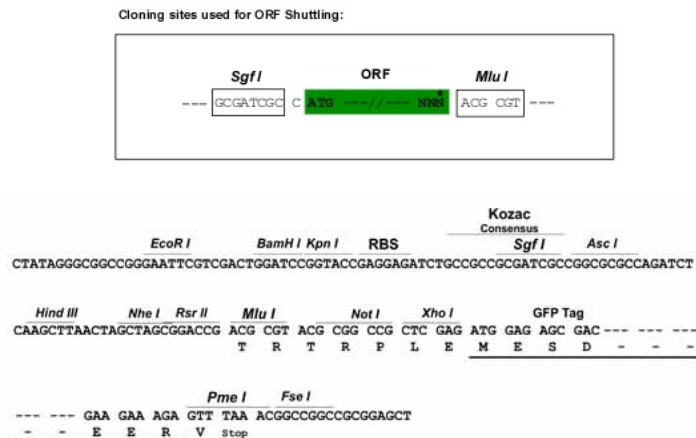
MGLSDGEWQLVLNVWGKVEADIPGHGQEVLRIRLFGKHPETLEKFDKFKHLKSEDEMKASEDLKKGATVLR  
 TALGGILKKKGHHEAEIKPLAQSHATKHKIPVKYLEFISECIIQVLQSKHPGDFGADAQGMNKALELFR  
 KDMASNYKELGFQG

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_005368

**ORF Size:** 462 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\\_005368.3](#)

**RefSeq Size:** 1078 bp

**RefSeq ORF:** 465 bp

**Locus ID:** 4151

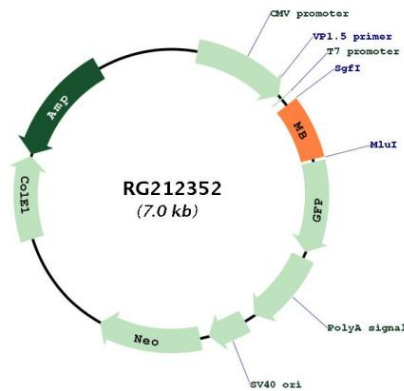
**UniProt ID:** [P02144](#)

**Cytogenetics:** 22q12.3

**Domains:** globin

**Gene Summary:** This gene encodes a member of the globin superfamily and is predominantly expressed in skeletal and cardiac muscles. The encoded protein forms a monomeric globular haemoprotein that is primarily responsible for the storage and facilitated transfer of oxygen from the cell membrane to the mitochondria. This protein also plays a role in regulating physiological levels of nitric oxide. Multiple transcript variants encoding distinct isoforms exist for this gene. [provided by RefSeq, May 2020]

**Product images:**



Circular map for RG212352