

Product datasheet for **RG203113**

Myoglobin (MB) (NM_203378) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Myoglobin (MB) (NM_203378) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: MB
Synonyms: PVALB
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG203113 representing NM_203378
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCTCAGCGACGGGAATGGCAGTTGGTGTGAACGCTCTGGGGGAAGGTGGAGGCTGACATCCCAG
GCCATGGGCAGGAAGTCTCATCAGGCTCTTAAGGGTACCCAGAGACTCTGGAGAAGTTTGACAAAGTT
CAAGCACCTGAAGTCAGAGGACGAGATGAAGGCATCTGAGGACTTAAAGAAGCATGGTGCCACTGTGCTC
ACCGCCCTGGGTGGCATCTTAAGAAGAAGGGGCATCATGAGGCAGAGATTAAGCCCTGGCACAGTCCG
ATGCCACCAAGCAAGATCCCCGTGAAGTACCTGGAGTTCATCTCGGAATGCATCATCCAGTTCTGCA
GAGCAAGCATCCCGGGGACTTTGGTGTGATGCCAGGGGGCCATGAACAAGGCCCTGGAGCTGTTCCGG
AAGGACATGGCCTCCAACACTACAAGGAGCTGGGCTTCCAGGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG203113 representing NM_203378
Red=Cloning site Green=Tags(s)

MGLSDGEWQLVLNVWGKVEADIPGHGQEVLRIRLFGHPETLEKFDKFKHLKSEDEMKASEDLKKHGATVL
TALGGILKKKGHHEAEIKPLAQSHATKHKIPVKYLEFISECIIQVLQSKHPGDFGADAQGMNKALELFR
KDMASNYKELGFQG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

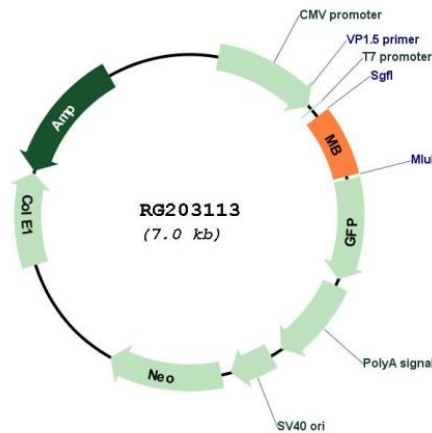


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Cloning Scheme:



Plasmid Map:



ACCN: NM_203378

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:	<ol style="list-style-type: none">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_203378.1 , NP_976312.1
RefSeq Size:	1153 bp
RefSeq ORF:	465 bp
Locus ID:	4151
UniProt ID:	P02144
Cytogenetics:	22q12.3
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]