

## **Product datasheet for RC213272**

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OriGene Technologies, Inc.

## Myoglobin (MB) (NM\_203377) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Myoglobin (MB) (NM\_203377) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: Myoglobin
Synonyms: PVALB
Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC213272 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGGCTCAGCGACGGGAATGGCAGTTGGTGCTGAACGTCTGGGGGAAGGTGGAGGCTGACATCCCAG
GCCATGGGCAGGAAGTCCTCATCAGGCTCTTTAAGGGTCACCCAGAGACTCTGGAGAAGTTTGACAAGTT
CAAGCACCTGAAGTCAGAGGACGAGATGAAGGCATCTGAGGACTTAAAGAAGCATGGTGCCACTGTGCTC
ACCGCCCTGGGTGGCATCCTTAAGAAGAAGAAGGGCATCATGAGGCAGAGATTAAGCCCCTGGCACAGTCGC
ATGCCACCAAGCACAAGATCCCCGTGAAGTACCTGGAGTTCATCTCGGAATGCATCATCCAGGTTCTGCA
GAGCAAGCATCCCGGGGACTTTGGTGCTGATGCCCAGGGGGCCATGAACAAGGCCCTGGAGCTGTTCCGG
AAGGACATGGCCTCCAACTACAAGGAGCTTGGGCTTCCAGGGC

 ${\color{blue} \textbf{ACGCGT}} \textbf{ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT}$ 

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213272 protein sequence

Red=Cloning site Green=Tags(s)

MGLSDGEWQLVLNVWGKVEADIPGHGQEVLIRLFKGHPETLEKFDKFKHLKSEDEMKASEDLKKHGATVL TALGGILKKKGHHEAEIKPLAQSHATKHKIPVKYLEFISECIIQVLQSKHPGDFGADAQGAMNKALELFR

**KDMASNYKELGFQG** 

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

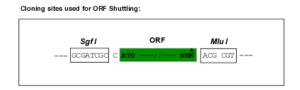
**Chromatograms:** https://cdn.origene.com/chromatograms/mk6047 a05.zip

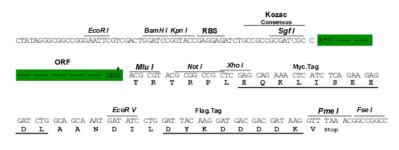




**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_203377

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.

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

0.22um filter is required.

**RefSeq:** <u>NM 203377.1</u>, <u>NP 976311.1</u>

RefSeq Size: 1170 bp RefSeq ORF: 465 bp



**Locus ID:** 4151

UniProt ID: P02144

 Cytogenetics:
 22q12.3

 MW:
 17.2 kDa

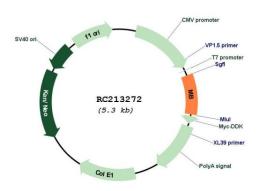
**Gene Summary:** This gene encodes a member of the globin superfamily and is predominantly expressed in

skeletal and cardiac muscles. The encoded protein forms a monomeric globular

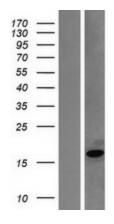
haemoprotein that is primarily responsible for the storage and facilitated transfer of oxygen from the cell membrane to the mitochondria. This protein also plays a role in regulating physiological levels of nitric oxide. Multiple transcript variants encoding distinct isoforms exist

for this gene. [provided by RefSeq, May 2020]

## **Product images:**



Circular map for RC213272



Western blot validation of overexpression lysate (Cat# [LY404319]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213272 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).