

Product datasheet for RC213272

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 Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213272 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCTCAGCGACGGGAATGGCAGTTGGTCTGAACGCTGGGGGAAGGTGGAGGCTGACATCCCAG
GCCATGGGCAGGAAGTCTCATCAGGCTCTTAAGGGTACCCAGAGACTCTGGAGAAGTTTGACAAGTT
CAAGCACCTGAAGTCAGAGGACGAGATGAAGGCATCTGAGGACTTAAGAAGCATGGTGCCACTGTGCTC
ACCGCCCTGGGTGGCATCCTTAAGAAGAAGGGGCATCATGAGGCAGAGATTAAGCCCTGGCACAGTCGC
ATGCCACCAAGCAAGATCCCCGTGAAGTACCTGGAGTTCATCTCGGAATGCATCATCCAGGTTCTGCA
GAGCAAGCATCCCGGGGACTTTGGTGTGATGCCAGGGGGCCATGAACAAGGCCCTGGAGCTGTTCCGG
AAGGACATGGCCTCCAACATAAGGAGCTGGGCTTCCAGGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213272 protein sequence
Red=Cloning site Green=Tags(s)

MGLSDGEWQLVLNVWGKVEADIPGHGQEVLIIRLFKHPETLEKFDKFKHLKSEDEMKASEDLKKHGATVL
TALGGILKKKGHHEAEIKPLAQSHATKHKIPVKYLEFISECIIQVLQSKHPGDFGADAQGAMNKALELFR
KDMASNYKELGFQG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6047_a05.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



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.

RefSeq: [NM_203377.1](#), [NP_976311.1](#)

RefSeq Size: 1170 bp

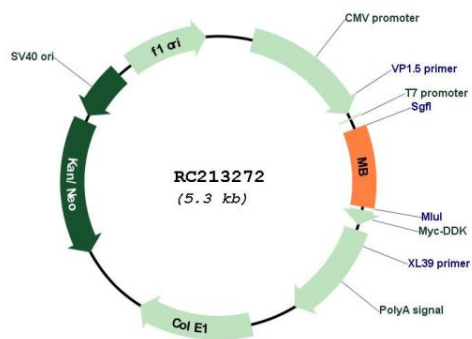
RefSeq ORF: 465 bp

Locus ID: 4151

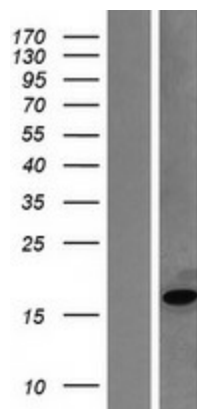
UniProt ID: [P02144](#)
 Cytogenetics: 22q12.3
 MW: 17.2 kDa

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]).