

Product datasheet for MR201002

Hbb-b2 (NM_016956) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Hbb-b2 (NM_016956) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Hbb-b2
Synonyms: AI036344; beta2; Hbb2; Hbbt2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR201002 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTGCACCTGACTGATGCTGAGAAGTCTGCTGTCTCTTGCCTGTGGCAAAGGTGAACCCCGATGAAG
 TTGGTGGTGAGGCCCTGGCAGGCTGCTGGTTGTCTACCTTGGACCCAGCGGTACTTTGATAGCTTTGG
 AGACCTATCCTCTGCCTCTGCTATCATGGTAATCCCAAGGTGAAGGCCCATGGCAAAAAGGTGATAACT
 GCCTTTAACGAGGGCCTGAAAACTGGACAACCTCAAGGGCACCTTTGCCAGCCTCAGTGAGCTCCACT
 GTGACAAGCTGCATGTGGATCCTGAGAACTTCAGGCTCCTGGCAATGCGATCGTGATTGTGCTGGCCA
 CCACCTGGCAAGGATTTACCCCTGCTGCACAGGCTGCCTTCCAGAAGGTGGTGGCTGGAGTGGCCACT
 GCCTGGCTCACAAGTACCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR201002 protein sequence
 Red=Cloning site Green=Tags(s)

MVHLTDAEKSAVSCLWAKVNPDEVGGEALGRLLVYYPWTQRYFDSFGDLSSASAIMGNPKVKAHGKVKVIT
 AFNEGLKNLDNLKGFASLSELHCDKLHVDPENFRLLGNIAIVIVLGHHLGKDFTPAAQAQFQKVAVGAT
 ALAHKYH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_016956

ORF Size: 444 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_016956.2](#), [NP_058652.1](#)

RefSeq Size: 630 bp

RefSeq ORF: 444 bp

Locus ID: 15130

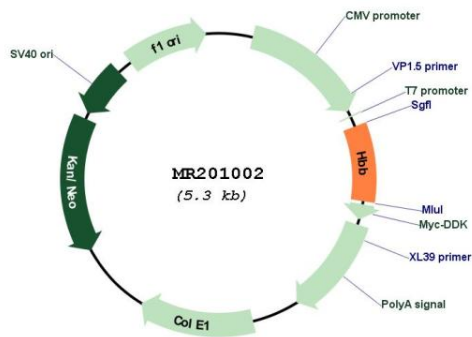
UniProt ID: [P02089](#)

Cytogenetics: 7 54.85 cM

MW: 15.9 kDa

Gene Summary: This gene encodes a beta polypeptide chain found in adult hemoglobin, which consists of a tetramer of two alpha chains and two beta chains, and which functions in the transport of oxygen to various peripheral tissues. This gene is one of a cluster of beta-hemoglobin genes that are distally regulated by a locus control region, and which are organized along the chromosome in the order of their developmental expression. In mouse, two major strain-specific haplotypes of the beta-globin gene cluster are found - a "single" haplotype found in C57BL/-type strains, which includes two highly similar adult beta-globin genes, beta s and beta t, and a "diffuse" haplotype found in strains such as BALB/c and 129Sv, which includes two somewhat diverse adult beta-globin genes, beta-major and beta-minor. This gene represents the beta-minor adult gene found in the "diffuse" haplotype. Primary chromosome 7 of the mouse reference genome assembly, which is derived from C57BL/6 strain mice, represents the "single" haplotype, while the "diffuse" haplotype is represented in the reference genome collection by the BALB/c strain alternate contig, NT_095534.1. [provided by RefSeq, May 2013]

Product images:



Circular map for MR201002