

Product datasheet for **RC203258**

HBA-T2 (HBB) (NM_000518) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HBA-T2 (HBB) (NM_000518) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HBB
Synonyms:	beta-globin; CD113t-C; ECYT6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203258 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGCACCTGACTCCTGAGGAGAAGTCTGCCGTTACTGCCCTGTGGGGCAAGGTGAACGTGGATGAAG
TTGGTGGTGAGGCCCTGGGCAGGCTGCTGGTGGTCTACCTTTGGACCCAGAGGTTCTTTGAGTCTTTGG
GGATCTGTCCACCCCTGATGCTGTTATGGGCAACCCTAAGGTGAAGGCTCATGGCAAGAAAGTCTCGGT
GCCTTTAGTGATGGCCTGGCTCACCTGGACAACCTCAAGGGCACCTTTGCCACACTGAGTGAGCTGCACT
GTGACAAGCTGCACGTGGATCCTGAGAACTTCAGGCTCCTGGCAACGTGCTGGTCTGTGTGCTGGCCCA
TCACTTTGGCAAAGAATTCACCCACCAGTGCAGGCTGCCTATCAGAAAGTGGTGGCTGGTGGCTAAT
GCCTGGCCCAAGTATCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC203258 protein sequence Red=Cloning site Green=Tags(s)
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MVHLTPEEKSAVTALWGKYNVDEVGGEALGRLLVYYPWTQRFFESFGDLSTPDVAVMGNPKVKAHGKKVLG
AFSDGLAHLNLDLKGTFATLSELHCDKLHVDPENFRLLGNVLVLCVLAHFGKEFTPPVQAAAYQKVAVGAN
ALAHKYH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

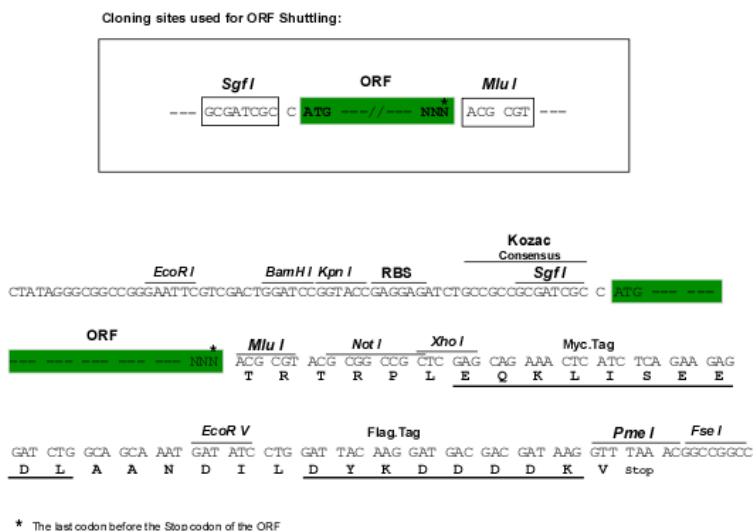
Chromatograms:	https://cdn.origene.com/chromatograms/mk6051_h08.zip
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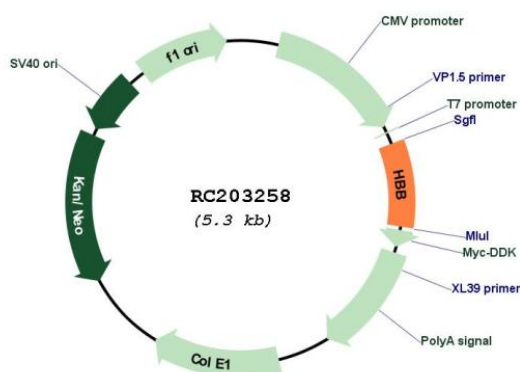
View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_000518

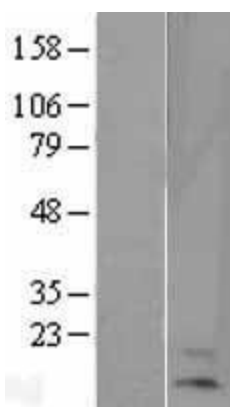
ORF Size: 441 bp

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](#)

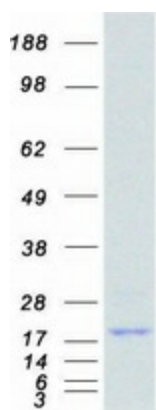
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_000518.5</u>
RefSeq Size:	626 bp
RefSeq ORF:	444 bp
Locus ID:	3043
UniProt ID:	<u>P68871</u>
Cytogenetics:	11p15.4
Domains:	globin
MW:	16 kDa
Gene Summary:	The alpha (HBA) and beta (HBB) loci determine the structure of the 2 types of polypeptide chains in adult hemoglobin, Hb A. The normal adult hemoglobin tetramer consists of two alpha chains and two beta chains. Mutant beta globin causes sickle cell anemia. Absence of beta chain causes beta-zero-thalassemia. Reduced amounts of detectable beta globin causes beta-plus-thalassemia. The order of the genes in the beta-globin cluster is 5'-epsilon -- gamma-G -- gamma-A -- delta -- beta--3'. [provided by RefSeq, Jul 2008]

Product images:



Western blot validation of overexpression lysate (Cat# [LY400174]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203258 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HBB protein (Cat# [TP303258]). The protein was produced from HEK293T cells transfected with HBB cDNA clone (Cat# RC203258) using MegaTran 2.0 (Cat# [TT210002]).