

Product datasheet for **RG203742**

HBA2 (NM_000517) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: HBA2 (NM_000517) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: HBA2
Synonyms: ECYT7; HBA-T2; HBH
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG203742 representing NM_000517
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGTCTCCTGCCGACAAGACCAACGTCAAGGCCGCTGGGGTAAGGTGGCGCGCACGCTGGCG
AGTATGGTGGGAGGCCCTGGAGAGGATGTTCTGTCTTCCCCACCACCAAGACCTACTCCCCGCACTT
CGACCTGAGCCACGGCTCTGCCAGGTTAAGGGCCACGGCAAGAAGGTGGCCGACGCGCTGACCAACGCC
GTGGCGCACGTGGACGACATGCCAACGCGCTGTCCGCCCTGAGCGACCTGCACGCGCACAAGCTTCGGG
TGGACCCGGTCAACTTCAAGCTCCTAAGCCACTGCCTGCTGGTGACCCTGGCCGCCACCTCCCCGCCGA
GTTACCCCTGCGGTGCACGCCTCCCTGGACAAGTTCTGGCTTCTGTGAGCACCGTGTGACCTCCAAA
TACCGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG203742 representing NM_000517
Red=Cloning site Green=Tags(s)

MVLSPADKTNVKAAWGKVGAHAGEYGAELERMFLSFPTTKTYFPHFDLSHGSAQVKGHGKGVADALNTNA
VAHVDDMPNALSALSDLHAKLRVDPVNFKLLSHCLLVTLAAHLPAEFTPAVHASLDKFLASVSTVLTISK
YR

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: NM_000517

ORF Size: 426 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_000517.6](#)

RefSeq Size: 575 bp

RefSeq ORF: 429 bp

Locus ID: 3040

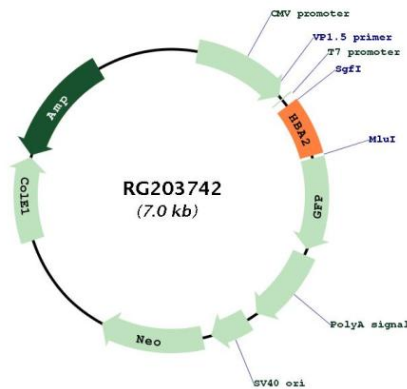
UniProt ID: [P69905](#)

Cytogenetics: 16p13.3

Domains: globin

Gene Summary: The human alpha globin gene cluster located on chromosome 16 spans about 30 kb and includes seven loci: 5'- zeta - pseudozeta - mu - pseudoalpha-1 - alpha-2 - alpha-1 - theta - 3'. The alpha-2 (HBA2) and alpha-1 (HBA1) coding sequences are identical. These genes differ slightly over the 5' untranslated regions and the introns, but they differ significantly over the 3' untranslated regions. Two alpha chains plus two beta chains constitute HbA, which in normal adult life comprises about 97% of the total hemoglobin; alpha chains combine with delta chains to constitute HbA-2, which with HbF (fetal hemoglobin) makes up the remaining 3% of adult hemoglobin. Alpha thalassemias result from deletions of each of the alpha genes as well as deletions of both HBA2 and HBA1; some nondeletion alpha thalassemias have also been reported. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG203742