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## **Human HBG2 ORF Clone in Mammalian Expression Vector (DYKDDDDK Tag)**

Overview	
Quantity:	10 μg
Gene:	HBG2
Species:	Human
Fusion tag:	DYKDDDDK Tag
Insert:	ORF
Vector:	Mammalian Expression Vector
Application:	Protein Expression (PExp)
Product Details	
Purpose:	Expression/transfection ready cDNA ORF clone of Human HBG2 with C terminal DYKDDDDK
	tag is ideal for express proteins in E.coli & mammalian cells.
Brand:	GenEZ™
Insert Length:	444 bp
Vector Backbone:	pcDNA3.1+C-(K)-DYK
Promoter:	CMV Promoter
Selectable Marker:	Neomycin
Bacterial Resistance:	Ampicillin
Expression Type:	Transient, Stable
Sequence:	ATGGGTCATT TCACAGAGGA GGACAAGGCT ACTATCACAA GCCTGTGGGG CAAGGTGAAT
	GTGGAAGATG CTGGAGGAGA AACCCTGGGA AGGCTCCTGG TTGTCTACCC ATGGACCCAG
	AGGTTCTTTG ACAGCTTTGG CAACCTGTCC TCTGCCTCTG CCATCATGGG CAACCCCAAA
	GTCAAGGCAC ATGGCAAGAA GGTGCTGACT TCCTTGGGAG ATGCCATAAA GCACCTGGAT
	GATCTCAAGG GCACCTTTGC CCAGCTGAGT GAACTGCACT GTGACAAGCT GCATGTGGAT

## **Product Details**

Poetrictions:	For Doggarch Llog only
Application Details	
NCBI Accession:	NM_000184
Gene ID:	3048
Gene: Alternative Name: Background:	HBG2 (HBG2 Products)  The gamma globin genes (HBG1 and HBG2) are normally expressed in the fetal liver, spleen and bone marrow. Two gamma chains together with two alpha chains constitute fetal hemoglobin (HbF) which is normally replaced by adult hemoglobin (HbA) at birth. In some beta thalassemias and related conditions, gamma chain production continues into adulthood. The two types of gamma chains differ at residue 136 where glycine is found in the G-gamma product (HBG2) and alanine is found in the A-gamma product (HBG1). The former is predominant at birth. The order of the genes in the beta-globin cluster is: 5'- epsilon gamma-C-gamma-A delta beta3'. [provided by RefSeq, Jul 2008].
Target Details	
Grade: Components:	End-sequenced  The GenEZ ORF clone is delivered as 10 µg of lyophilized plasmid DNA in a vial.
Sequencing Primer:	<ul> <li>Forward primer: 5'-TAATACGACTCACTATAGGG-3'</li> <li>Reverse primer: 5'-CCTCGACTGTGCCTTCTA-3'</li> </ul>
Characteristics:	Gene cDNA ORF clone sequences were retrieved from the NCBI Reference Sequence Database (RefSeq). These sequences represent the protein coding region of the gene cDNA ORF which is encoded by the open reading frame (ORF) sequence.
Specificity:	ORF Insert Method: CloneEZ® Seamless cloning technology, recombination-based cloning technology
	CCTGAGAACT TCAAGCTCCT GGGAAATGTG CTGGTGACCG TTTTGGCAAT CCATTTCGGC AAAGAATTCA CCCCTGAGGT GCAGGCTTCC TGGCAGAAGA TGGTGACTGG AGTGGCCAGT GCCCTGTCCT CCAGATACCA CTGA

Restrictions: For Research Use only

## Handling

Format:	Lyophilized
Storage:	RT/-20 °C
Storage Comment:	<ul> <li>Keep the vial sealed and store at -20°C for long-term storage.</li> <li>Before use, centrifuge the vial at 6,000 g x g for 1 minute at 4°C.</li> <li>Open the lid and add 100 µl (or other volume depending on your desired final concentration) of distilled water (or TE buffer) to dissolve the DNA.</li> <li>If necessary, heat the solution at 50°C for 15 minutes to dissolve the DNA.</li> <li>Close the lid and vortex the vial for 1 minute.</li> <li>Aliquot the dissolved plasmid DNA and store in small aliquots at -20°C.</li> </ul>
Expiry Date:	12 months
Publications	
Product cited in:	Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)