

Product datasheet for **RG201614**

GBA (NM_001005741) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GBA (NM_001005741) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GBA
Synonyms:	GBA1; GCB; GLUC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG201614 representing NM_001005741
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGTTTTCAAGTCCTTCCAGAGAGGAATGTCCCAAGCCTTTGAGTAGGGTAAGCATCATGGCTGGCA
 GCCTCACAGGATTGCTTCTACTTTCAGGCAGTGTGTGGGCATCAGGTGCCCGCCCTGCATCCCTAAAAG
 CTTTCGGCTACAGCTCGGTGGTGTGTGTCTGCAATGCCACATACTGTGACTCCTTTGACCCCCGACCTTT
 CCTGCCCTTGGTACCTTACGCCGTATGAGAGTACACGCAGTGGGCGACGGATGGAGCTGAGTATGGGGC
 CCATCCAGGCTAATCACACGGGCACAGGCTGCTACTGACCCTGCAGCCAGAACAGAAGTCCAGAAAGT
 GAAGGGATTTGGAGGGCCATGACAGATGCTGCTGCTCTCAACATCCTTGCCTGTCACCCCTGCCCAA
 AATTTGCTACTTAAATCGTACTTCTCTGAAGAAGGAATCGGATATAACATCATCCGGGTACCCATGGCCA
 GCTGTGACTTCTCCATCCGCACCTACACCTATGCAGACACCCCTGATGATTTCCAGTTGCACAACTCAG
 CCTCCAGAGGAAGATACCAAGCTCAAGATACCCCTGATTCACCGAGCCCTGCAGTTGGCCAGCGTCCC
 GTTTCACCTCCTTGCCAGCCCTGGACATCACCCACTTGGCTCAAGACCAATGGAGCGGTGAATGGGAAGG
 GGTCACTCAAGGGACAGCCCGGAGACATCTACCACCAGACCTGGGCCAGATACTTTGTGAAGTTCCTGGA
 TGCCATGCTGAGCACAAGTTACAGTCTGGGCAGTGACAGCTGAAAATGAGCCTTCTGCTGGGCTGTTG
 AGTGGATACCCCTTCCAGTGCCTGGGCTTACCCTGAACATCAGCGAGACTTCAATGCCCGTGACCTAG
 GTCCTACCCTCGCCAACAGTACTACCACAATGTCGCCCTACTCATGCTGGATGACCAACGCTTGTCTGT
 GCCCACTGGGCAAGGTGGTACTGACAGACCCAGAAGCAGCTAAATATGTTTCAATGGCATTGCTGTACAT
 TGGTACCTGGACTTTCTGGCTCCAGCCAAAGCCACCCTAGGGGAGACACACCCGCTGTTCCCAACACCA
 TGCTCTTTGCCTCAGAGGCTGTGTGGCTCCAAGTTCTGGGAGCAGAGTGTGCGGCTAGGCTCCATGGGA
 TCGAGGGATGCAGTACAGCCACAGCATCATCAGAACCTCCTGTACCATGTGGTTCGGCTGGACCGACTGG
 AACCTTGCCTGAACCCGAAGGAGGACCAATTGGGTGCGTAACTTTGTCGACAGTCCCATCATTGTAG
 ACATCACCAAGGACACGTTTTACAAACAGCCCATGTTCTACCACCTTGGCCACTTCAGCAAGTTCATTCC
 TGAGGGCTCCCAGAGAGTGGGCTGGTTGCCAGTCAAGAAGCAGCTGGACGCAGTGGCACTGATGCAT
 CCCGATGGCTCTGCTGTTGTGGTCTGCTAAACCCTCCTCTAAGGATGTGCTCTTACCATCAAGGATC
 CTGCTGTGGGCTCCTGGAGACAATCTCACCTGGCTACTCCATTCACACCTACCTGTGGCGTCGCCAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG201614 representing NM_001005741
 Red=Cloning site Green=Tags(s)

MEFSSPSREECPKPLSRVSIIMAGSLTGLLLLQAVSWASGARPCIPKSFYSSVVCVFNATYCDSDPPTF
 PALGTFSTRYESTRSGRRMELSMGPIQANHTGTGLLLTLQPEQKFKVKVGGAMTDAALNILALSPPAQ
 NLLLKSYFSEEGIGYNIIRVPMASCDFSIRTYTYADTPDDQLHNFSLPEEDTKLKIPLIHRALQLAQRP
 VSLLASPWTSPTWLKTNQAVNGKSLKQPGDIYHQTWARYFVKFLDAYAEHKLQFVAVTAENEPSAGLL
 SGYPFQCLGFTPEHQDFIARDLGPLANSTHNVRLMLDDQRLLLPHWAKVVLTDPEAAKYVHGIADVH
 WYLDLFLAPAKATLGETHRLFPNTMLFAEACVGSKFWEQSVRLGSWDRGMQYSHSIITNLLYHVVGWTDW
 NLALNPEGPNWVRNFVDSPIIVDITKDTFYKQPMFYHLGHFSKFIPEGSQVRVGLVASQKNDLDAVALMH
 PDGSAVVVVLNRSSKDVPLTIKDPVGFLETISPGYSIHTYLWRRQ

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001005741

ORF Size: 1608 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

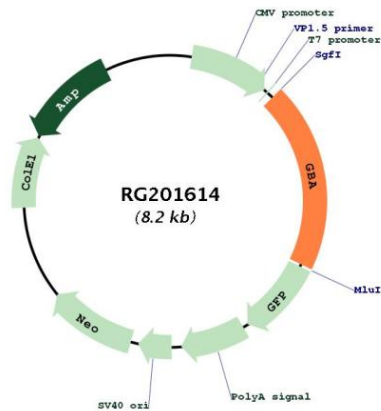
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_001005741.3](#)

RefSeq Size:	2432 bp
RefSeq ORF:	1611 bp
Locus ID:	2629
UniProt ID:	P04062
Cytogenetics:	1q22
Protein Families:	Druggable Genome
Protein Pathways:	Lysosome, Metabolic pathways, Other glycan degradation, Sphingolipid metabolism
Gene Summary:	This gene encodes a lysosomal membrane protein that cleaves the beta-glucosidic linkage of glycosylceramide, an intermediate in glycolipid metabolism. Mutations in this gene cause Gaucher disease, a lysosomal storage disease characterized by an accumulation of glucocerebrosides. A related pseudogene is approximately 12 kb downstream of this gene on chromosome 1. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2010]

Product images:



Circular map for RG201614