

## Product datasheet for **RC212242**

### **GBA (NM\_001005742) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GBA (NM_001005742) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GBA
Synonyms:	GBA1; GCB; GLUC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC212242 representing NM\_001005742  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGTTTTCAAGTCTTCCAGAGAGGAATGTCCCAAGCCTTTGAGTAGGGTAAGCATCATGGCTGGCA  
 GCCTCACAGGATTGCTTCTACTTCAGGCAGTGTGTGGGCATCAGGTGCCCGCCCTGCATCCCTAAAAG  
 CTTCCGGCTACAGCTCGGTGGTGTGTCTGCAATGCCACATACTGTGACTCCTTTGACCCCCGACCTTT  
 CCTGCCCTTGGTACCTTCAGCCGCTATGAGAGTACACGCAGTGGGCGACGGATGGAGCTGAGTATGGGGC  
 CCATCCAGGCTAATCACACGGGCACAGGCTGCTACTGACCCTGCAGCCAGAACAGAAGTCCAGAAAGT  
 GAAGGGATTTGGAGGGGCCATGACAGATGCTGCTGCTCTCAACATCCTTGCCTGTCACCCCTGCCCAA  
 AATTTGCTACTTAAATCGTACTTCTCTGAAGAAGGAATCGGATATAACATCATCCGGGTACCCATGGCCA  
 GCTGTGACTTCTCCATCCGCACCTACACCTATGCAGACACCCCTGATGATTTCCAGTTGCACAACTCAG  
 CCTCCAGAGGAAGATACCAAGCTCAAGATACCCCTGATTACCCGAGCCCTGCAGTTGGCCAGCGTCCC  
 GTTTCACCTCCTTGCCAGCCCTGGACATCACCCACTTGGCTCAAGACCAATGGAGCGGTGAATGGGAAGG  
 GGTCACTCAAGGGACAGCCCGGAGACATCTACCACCAGACCTGGGCCAGATACTTTGTGAAGTTCCTGGA  
 TGCCATGCTGAGCACAAGTTACAGTCTGGGCAGTGACAGCTGAAAAATGAGCCTTCTGCTGGGCTGTTG  
 AGTGGATACCCCTTCCAGTGCCTGGGCTTACCCTGAACATCAGCGAGACTTCAATGCCCGTGACCTAG  
 GTCCTACCCTCGCCAACAGTACTACCACAATGTCGCCCTACTCATGCTGGATGACCAACGCTTGTCTGT  
 GCCCACTGGGCAAGGTGGTACTGACAGACCCAGAAGCAGCTAAATATGTTTATGGCATTGCTGTACAT  
 TGGTACCTGGACTTTCTGGCTCCAGCCAAAGCCACCCTAGGGGAGACACCCGCTGTTCCCAACACCA  
 TGCTCTTTGCCTCAGAGGCTGTGTGGCTCCAAGTTCTGGGAGCAGAGTGTGCGGCTAGGCTCCTGGGA  
 TCGAGGGATGCAGTACAGCCACAGCATCATCAGAACCTCCTGTACCATGTGGTGGCTGGACCGACTGG  
 AACCTTGCCTGAACCCGAAGGAGGACCAATTGGGTGCGTAACTTTGTCGACAGTCCCATCATTGTAG  
 ACATCACCAAGGACACGTTTTACAACAGCCCATGTTCTACCACCTTGGCCACTTCAGCAAGTTCATTCC  
 TGAGGGCTCCCAGAGAGTGGGCTGGTTGCCAGTCAAGAAGCAGCTGGACGCAGTGGCACTGATGCAT  
 CCCGATGGCTCTGCTGTTGTGGTCTGCTAAACCCTCCTCAAGGATGTGCTCTTACCATCAAGGATC  
 CTGCTGTGGGCTCCTGGAGACAATCTCACCTGGCTACTCCATTCACACCTACCTGTGGCGTCGCCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC212242 representing NM\_001005742  
 Red=Cloning site Green=Tags(s)

MEFSSPSREECPKPLSRVSIIMAGSLTGLLLLQAVSWASGARPCIPKSFYSSVVCVNCATYCDSDPPTF  
 PALGTFSTRYESTRSGRMELSMGPIQANHTGTGLLLTLQPEQKFKVKVGGAMTAAAALNILALSPPAQ  
 NLLLLKSYFSEEGIGYNIIRVPMASCDFSIRTYTYADTPDDFQLHNFSLPEEDTKLKIPLIHRALQLAQRP  
 VLLASPWTSPTWLKTNGAVNGKSLKQPGDIYHQTWARYFVKFLDAYAEHKLQFVAVTAENEPSAGLL  
 SGYPFQCLGFTPEHQDFIARDLGPTLANSTHNVRLMLDDQRLLLPHWAKVVLTDPEAAKYVHGIADV  
 WYLDLFLAPAKATLGETHRLFPNTMLFASEACVSKFWEQSVRLGSWDRGMQYSHSIIITNLLYHVVGWTDW  
 NLALNPEGPNWVRNFVDSPIIVDITKDFYKQPMFYHLGHFSKFIPEGSQRVGLVASQKNDLDAVALMH  
 PDGSAVVVVLNRSKDVPLTIKDPVAVGLETISPYSIHTYLWRRQ

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8078\\_c07.zip](https://cdn.origene.com/chromatograms/mk8078_c07.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001005742

**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](mailto: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.

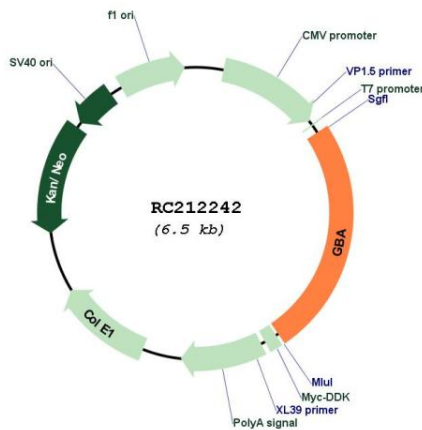
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

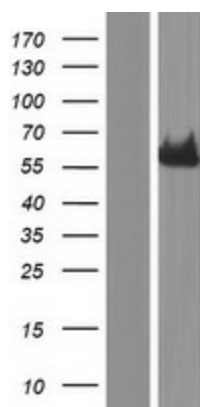
**RefSeq:** [NM\\_001005742.3](#)

RefSeq Size:	2413 bp
RefSeq ORF:	1611 bp
Locus ID:	2629
UniProt ID:	<a href="#">P04062</a>
Cytogenetics:	1q22
Protein Families:	Druggable Genome
Protein Pathways:	Lysosome, Metabolic pathways, Other glycan degradation, Sphingolipid metabolism
MW:	59.72 kDa
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]

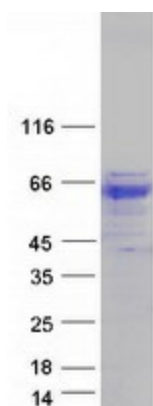
**Product images:**



Circular map for RC212242



Western blot validation of overexpression lysate (Cat# [LY423642]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212242 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GBA protein (Cat# [TP312242]). The protein was produced from HEK293T cells transfected with GBA cDNA clone (Cat# RC212242) using MegaTran 2.0 (Cat# [TT210002]).