OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC200608

Gba (NM_008094) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gba (NM_008094) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gba
Synonyms:	betaGC; GBA1; GC; GCase; GLUC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>MC200608 representing NM_008094.
Blue=ORF Red=Cloning site Green=Tag(s)

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCG
CGCCAGATCTCAAGCTTAACTAGCTAGCGGACCGAC
ATGGCTGCCAGGCTCATCGGATTCTTCCTATTTCAGGCGGTATCTTGGGCATATGGTGCCCAACCCTGC
ATCCCCAAAAGCTTTGGCTACAGCTCAGTGGTCTGTGTCTGTAATGCATCGTACTGTGACTCTCTTGAC
CCCGTGACCTTACCGGCTCTGGGTACCTTCAGCCGTTACGAGAGCACTCGACGTGGACGTCGGATGGAG
CTGAGTGTCGGGGCCATCCAGGCCAATCGCACTGGCACAGGGTTACTACTCACTTTGCAGCCAGAAAAG
AAGTTCCAGAAAGTGAAAGGATTTGGAGGCGCCATGACAGACGCCACTGCGCTCAACATCCTTGCTTTG
TCCCCACCTACTCAGAAGCTGCTACTCAGATCCTACTTCTCTACCAACGGAATTGAATATAACATCATC
CGGGTACCCATGGCCAGTTGTGACTTCTCCATCCGTGTCTATACCTATGCTGACACCCCTAACGACTTC
CAGTTATCCAACTTCAGCCTCCCAGAAGAAGACACCAAGCTCAAGATACCCCTGATTCACCAAGCCCTG
AAGATGTCCTCACGCCCCATTTCACTCTTTGCCAGTCCCTGGACATCACCCACTTGGCTCAAGACCAAT
GGAAGAGTGAATGGGAAGGGGTCGCTCAAGGGTCAGCCAGGGGATATCTTTCACCAGACCTGGGCCAAT
TACTTTGTCAAGTTTCTGGATGCTTATGCTAAGTATGGCCTAAGATTCTGGGCAGTGACAGCGGAGAAT
GAACCTACGGCAGGGCTCTTCACGGGGTACCCCTTCCAGTGCCTGGGCTTCACTCCTGAACACCAGAGA
GACTTCATTTCCCGTGACCTAGGGCCAGCCCTTGCCAACAGTTCCCATGATGTGAAGCTACTCATGCTA
GATGACCAACGCTTGCTGCTACCCCGCTGGGCAGAGGTGGTGCTCTCTGATCCAGAGGCAGCTAAGTAC
GTTCATGGCATTGCTGTTCACTGGTATATGGATTTCCTGGCTCCAGCCAAAGCTACTTTAGGAGAGACA
CACCGCTTGTTCCCCAACACAATGCTCTTTGCTTCGGAGGCCTGCGTGGGCTCCAAGTTCTGGGAACAG
AGTGTTCGGTTGGGCTCCTGGGATCGAGGGATGCAGTACAGTCACAGCATCATTACGAACCTCCTTTAC
CACGTAACTGGATGGACGGACTGGAACCTTGCCCTGAATCCTGAAGGAGGGCCCAACTGGGTCCGCAAC
TTTGTCGATAGCCCCATTATTGTCGACATCCCCAAAGACGCATTTTACAAACAGCCCATGTTCTACCAT
CTTGGCCACTTCAGCAAGTTCATTCCCGAGGGATCCCAGAGAGTGGCGTTGGTGGCCAGTGAGAGCACT
GACTTGGAAACAGTAGCACTGTTACGCCCTGACGGCTCTGCAGTTGTGGTCGTGTTAAACCGATCTTCG
GAGGATGTCCCTCTTACCATCAGTGATCCTGACCTGGGCTTCCTGGAGACCGTGTCACCTGGCTACTCC
ATTCACACTTACCTGTGGCGTCGCCAGTGA
ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAG
GATGACGACGATAAGGTTTAAACGGCCGGCCGCGGT

Chromatograms: https://cdn.origene.com/chromatograms/ja3708_g04.zip

Restriction Sites: RsrII-NotI

ACCN: NM_008094

Insert Size: 1548 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	BC006663
RefSeq Size:	2238 bp
RefSeq ORF:	1548 bp
Locus ID:	14466
UniProt ID:	P17439
Cytogenetics:	3 39.01 cM
MW:	57.6 kDa
Gene Summary:	Glucosylceramidase that catalyzes, within the lysosomal compartment, the hydrolysis of glucosylceramide/GlcCer into free ceramide and glucose (PubMed:24211208). Thereby, plays a central role in the degradation of complex lipids and the turnover of cellular membranes (PubMed:27378698). Through the production of ceramides, participates to the PKC-activated salvage pathway of ceramide formation (By similarity). Also plays a role in cholesterol metabolism (PubMed:24211208). May either catalyze the glucosylation of cholesterol, through a transglucosylation reaction that transfers glucose from glucosylceramide to cholesterol (PubMed:24211208). The short chain saturated C8:0-GlcCer and the mono-unsaturated C18:0-GlcCer being the most effective glucose donors for that transglucosylation reaction (By similarity). Under specific conditions, may alternatively catalyze the reverse reaction, transferring glucose from cholesteryl-beta-D-glucoside to ceramide (By similarity). Finally, may also hydrolyze cholesteryl-beta-D-glucoside to produce D-glucose and cholesterol (By similarity).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (1) differs in the 5' UTR compared to variant 2. Variants 1 and 2 encode the same protein.