

Product datasheet for **SC328285**

GM2A (NM_001167607) Human Untagged Clone

Product data:

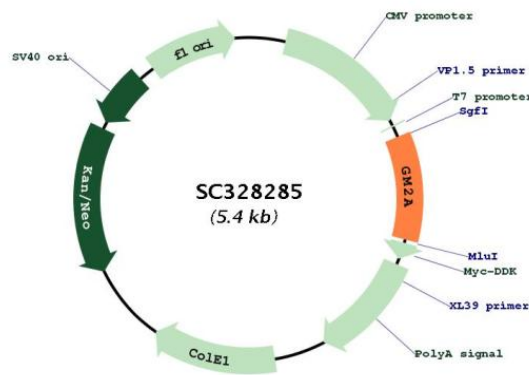
Product Type:	Expression Plasmids
Product Name:	GM2A (NM_001167607) Human Untagged Clone
Tag:	Tag Free
Symbol:	GM2A
Synonyms:	GM2-AP; SAP-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC328285 representing NM_001167607. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCAGTCCCTGATGCAGGCTCCCCTCCTGATCGCCCTGGGCTTGCTTCTCGCGGCCCTGCGCAAGCC
CACCTGAAAAAGCCATCCCAGCTCAGTAGCTTTTCTGGGATAACTGTGATGAAGGGAAGGACCCTGCG
GTGATCAGAAGCCTGACTCTGGAGCCTGACCCCATCATCGTTCTGAAATGTGACCCTCAGTGTCATG
GGCAGCACCAGTGTCCCCTGAGTTCTCCTCTGAAGGTGGATTTAGTTTTGGAGAAGGAGGTGGCTGGC
CTCTGGATCAAGATCCCATGCACAGACTACATTGGCAGCTGTACCTTTGAACACTTCTGTGATGTGCTT
GACATGTTAATTCCTACTGGGGAGCCCTGCCAGAGCCCTGCGTACCTATGGGCTTCTTGCCACTGT
CCCTTTTCTCTGTTTTGTGTTTGCCAAGGCCAACTCCCCTCTGCCCCCTTAATCCCCTTCT
ACAGTGAGTCCACTACCCTCACTGAAAATCATTTTGTACCACTTACATTTTAGGCTGGGGCAAGCAGCC
CTGACCTAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: Sgfl-MluI



[View online »](#)

Plasmid Map:


ACCN: NM_001167607

Insert Size: 561 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:	<u>NM_001167607.1</u>
RefSeq Size:	3480 bp
RefSeq ORF:	561 bp
Locus ID:	2760
Cytogenetics:	5q33.1
Protein Families:	Druggable Genome
Protein Pathways:	Lysosome
MW:	20.1 kDa
Gene Summary:	<p>This gene encodes a small glycolipid transport protein which acts as a substrate specific co-factor for the lysosomal enzyme beta-hexosaminidase A. Beta-hexosaminidase A, together with GM2 ganglioside activator, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl hexosamines. Mutations in this gene result in GM2-gangliosidosis type AB or the AB variant of Tay-Sachs disease. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2009]</p> <p>Transcript Variant: This variant (2) uses an alternate splice site in the 3' coding region, compared to variant 1. This results in a shorter protein (isoform 2), compared to isoform 1.</p> <p>Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.</p>