

## Product datasheet for **MC205674**

### Gm2a (NM\_010299) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gm2a (NM_010299) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gm2a
Synonyms:	AA408702; AW215435; GM2-AP; SAP-3
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >BC004651  
 GGCAGCCGTGAGTCGCATTGCCTAGACCGACACGGAGGACCATCGCCATGCACCGTCTACCGCTGCTGCT  
 CCTGCTGGGCTTCTGCTGCTCGCAGGCTCCGTCGCCCTGCGCGCCTCGTCCCGAAGCGCCTTTCCCAACTT  
 GGTGGCTTCTCCTGGGATAACTGTGATGAAGGAAAGGACCCTGCAGTGATCAAAAGCCTCACGATCCAAC  
 CTGACCCATTGTGGTTCCTGGAGATGTAGTCGTACGCTTGGAGGCAAGACCAGCGTCCCTCACTGC  
 TCCTCAGAAGGTGGAGCTCACCGTGGAGAAGGAAGTGGCTGGCTTCTGGGTCAAGATTCCTTGTAGAA  
 CAGCTAGGCAGCTGTAGCTACGAGAACATCTGTACCTGATAGACGAATACATTCTCTGGAGAGAGCT  
 GCCCAGAGCCCTGCACACCTACGGGCTGCCCTGCCACTGTCCCTTCAAGGAAGGTACCTACTCACTACC  
 CACGAGCAACTTCACAGTGCCTGACCTAGAGCTACCGAGCTGGCTGAGCACAGGCAACTACCGCATCCAG  
 AGTATCTTGAGCAGTGGTGGGAAGCGCCTGGGCTGCATCAAGATTGCTGCCTCTCTCAAGGGCAGATAAC  
 CTGGCAGCAGCCACCACAGAATGAAGGGCACCAGCACGGCAGGCCTCTTCTTGTGTTCCGGTCCCA  
 GGCCTGCCTGCCTAACTCTATCCTCCTACGGTCTCTACCCTCTCTGGAAATCATTGCAACCTGACCT  
 GAGGGAGGATGGACCAGGCCAACATCTGATGGGCTGTAAGCCATGCTCCTTTCACCCCTACCACTTT  
 CTAAGAATTTCTTCGTATCCAAAACAGTCAAGGAATGGGAACCAACATGTTTGGGAATCCTAAGGTCAA  
 AACTGGCCCAACCTGGACCTCCTGGAGTTATGCTCACCCACTTCTTTGTTTTAGTCAACCACTTTAAAA  
 CCAGGATAAACCGTATAATTTCTATTCCATCCTGAGCCTCTCTTCTGCAAAGAGGTCTAGGTAGTCAG  
 TCTTGGGTCCCTTATTAACCTCTGTGATTAAGTGCATTCTCTTTCGAACTTAACTTGTCAACACTGGGG  
 CTGACAGATCCTGAAGAGGCAGGGTGGTGTGTGACAGAAACCTGTGAGAGTTATTGTTGGGCATGCTCCA  
 GTAACCTTGGCAAAGCACAGGTACCTGTAGGGCCAAGCCGAAGACCTAGGGAGGCACAGCAATCACTTC  
 TGGGAGCGATGCCATTTTTCTTTTTCTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGTATGATGCCTTCAAGAA  
 TGGGATGGCATTCTTATACCTGACAAGAAACAACCAAAAAACCAATAGCACATGTGCTCTGGTCCAGG  
 TGGCCAGGGTCTGGAATGGCATATCTAGTTCTAAAGAGGTGCAGTCCCTGCAAGTCCATGTAAGGAAT  
 GTTCCAGATATTTGCAACATTTTTCTTCTTAGGCCCAAACCCAGCCGTTTATATGAAATTTGAGAAT  
 TTTTAACTATTGAAACAATGGTTTTTTTATATACTTACTATGCAGGCCAAAGGGGCCACAGGACT  
 CACCCAGGGACATAATCTGGCTCCAGGTGGCTGCTTTTCTCACATCTGTTTCTTCTCAATCTCAAG  
 TTATCTGGCCGCATCTTCTCCCTTCAAGGTCAAGTCTTGGTGCCTGGCCTCAAAGAGGGCTCAGCCT  
 GCACTAGAGCAGGTCTACATGGCTTCTGAGAGCTGGGCACTGTGCCAACTCCGAGCCATCACCACCAGA  
 GTAGAGGGGTTCACTGGAGTAGATCCCACCTAGCAGCCACCACGTGGAACAGGGGCTCTGTGAAGAGA  
 GTGGGTCCACATCAGGTTGCACCATGACAACCTCCTGAGCCTCCTGGACAGCCAGGTTCTGGACTAG  
 AAGACTGGTCTGGCAATAAATCTTTTTAACTTGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** RsrII-NotI

**ACCN:** NM\_010299

**Insert Size:** 582 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: [BC004651](#), [AAH04651](#)

RefSeq Size: 2024 bp

RefSeq ORF: 582 bp

Locus ID: 14667

UniProt ID: [Q60648](#)

Cytogenetics: 11 32.13 cM

**Gene Summary:** Binds gangliosides and stimulates ganglioside GM2 degradation. It stimulates only the breakdown of ganglioside GM2 and glycolipid GA2 by beta-hexosaminidase A. It extracts single GM2 molecules from membranes and presents them in soluble form to beta-hexosaminidase A for cleavage of N-acetyl-D-galactosamine and conversion to GM3. The large binding pocket can accommodate several single chain phospholipids and fatty acids, GM2A also exhibits some calcium-independent phospholipase activity.[UniProtKB/Swiss-Prot Function]