

Product datasheet for **SC126904**

GM2A (NM_000405) Human Untagged Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | GM2A (NM_000405) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | GM2A |
| Synonyms: | GM2-AP; SAP-3 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >OriGene ORF within SC126904 sequence for NM_000405 edited (data generated by NextGen Sequencing) |

```
ATGCAGTCCCTGATGCAGGCTCCCCTCCTGATCGCCCTGGGCTTGCTTCTCGCGGCCCT
GCGCAAGCCCACCTGAAAAGCCATCCCAGCTCAGTAGCTTTTCTGGGATAACTGTGAT
GAAGGGAAGGACCCTGCGGTGATCAGAAGCCTGACTCTGGAGCCTGACCCCATCATCGTT
CCTGGAAATGTGACCCTCAGTGTGATGGGCAGCACCAGTGTCCCCTGAGTTCTCCTCTG
AAGGTGGATTTAGTTTTGGAGAAGGAGGTGGCTGGCCTCTGGATCAAGATCCCATGCACA
GACTACATTGGCAGCTGTACCTTTGAACACTTCTGTGATGTGCTTGACATGTTAATTCT
ACTGGGGAGCCCTGCCAGAGCCCCTGCGTACCTATGGGCTTCTTGCCACTGTCCCTTC
AAAGAAGGAACCTACTACTGCCAAGAGCGAATTCGTTGTGCCTGACCTGGAGCTGCC
AGTTGGCTCACCACCGGAACTACCGCATAGAGAGCGTCTGAGCAGCAGTGGGAAGCGT
CTGGGCTGCATCAAGATCGCTGCCTCTCTAAAGGCATATAA
```

Clone variation with respect to NM_000405.4



[View online »](#)

| | |
|-------------------------------------|---|
| 5' Read Nucleotide Sequence: | >OriGene 5' read for NM_000405 unedited NGCTTCAGGATTTTGTAAATACGACTCACTATAGGGCGGCCGCGNAATTCGCACCAGCCGA TGCAGTCCCTGATGCAGGCTCCCCTCCTGATCGCCCTGGGCTTGCTTCTCGCGGCCCTG CGCANAGCCCACCTGAAAAAGCCATCCCAGCTCAGTAGCTTTTCTGGGATAACTGTGAT GAAGGGAAGGACCCTGCGGTGATCAGAAGCCTGACTCTGGAGCCTGACCCCATCATCGTT CCTGGAAATGTGACCCTCAGTGTGATGGGCAGCACCAGTGTCCCCTGAGTTCTCCTCTG AAGGTGGATTTAGTTTTGGAGAAGGAGGTGGCTGGCCTCTGGATCAAGATCCCATGCACA GACTACATTGGCAGTGTACCTTTGAACACTTCTGTGATGTGCTTGACATGTTAATTCCT ACTGGGGAGCCCTGCCAGAGCCCTGCGTACCTATGGGCTTCCTTGCCACTGTCCCTTC AAAGAAGGAACCTACTACTGCCAAGAGCGAATTCGTTGTGCCTGACCTGGAGCTGCC AGTTGGCTCACCACCGGAACTACCGCATAGAGAGCGTCTGAGCAGCAGTGGGAAGCGT CTGGGCTGCATCAAGATCGCTGCCTCTCTAAAGGGCATATAACATGGCATCTGCCACAGC AGAATGGAGCGGTGTGAGGAAGGTCCCTTTTCTCTGTTNTGTGTTTGCCAAGGCCAAAC TCCCACTCTGCCCCCTTTAATCCCCTTTCTACAGTGAGTCCACTACCCTCACTGAAN ATCATTNTGTACCACTTACATTNTANGCTGGNGCAAGCAGCCCTGACCTAAGGGAGAATG AGTGGNACAGTTCCTTGATAGCCCAGGGCATCTGCTGGGCTGACCACGTTACTCATCCCC TTAACATTCTCTAAGAGCCTCGTTCATTNACG |
| Restriction Sites: | NotI-NotI |
| ACCN: | NM_000405 |
| 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: | <ol style="list-style-type: none"> 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_000405.3 , NP_000396.2 |
| RefSeq Size: | 2521 bp |
| RefSeq ORF: | 582 bp |
| Locus ID: | 2760 |
| UniProt ID: | P17900 |
| Cytogenetics: | 5q33.1 |
| Domains: | ML |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Lysosome |

Gene Summary:

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]

Transcript Variant: This variant (1) encodes the longer isoform (1).