

Product datasheet for SC325001

OriGene Technologies, Inc.

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Sphingomyelin Synthase 2 (SGMS2) (NM_001136258) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Sphingomyelin Synthase 2 (SGMS2) (NM_001136258) Human Untagged Clone

Tag: Tag Free
Symbol: SGMS2

Synonyms: CDL; SMS2

Mammalian Cell

Selection:

None

Vector: pCMV6-XL6

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_001136258 edited

ATGGATATCATAGAGACAGCAAAACTTGAAGAACATTTGGAAAAATCAACCCAGTGATCCT ACGAACACTTATGCAAGACCCGCTGAACCTGTTGAAGAAGAAAAACAAAAATGGCAATGGT AAACCCAAGAGCTTATCCAGTGGGCTGCGAAAAGGCACCAAAAAGTACCCGGACTATATC CAAATTGCTATGCCCACTGAATCAAGGAACAAATTTCCACTAGAGTGGTGGAAAACGGGC ATTGCCTTCATATATGCAGTTTTCAACCTCGTCTTGACAACCGTCATGATCACAGTTGTA CATGAGAGGGTCCCTCCCAAGGAGCTTAGCCCTCCACTCCCAGACAAGTTTTTTGATTAC TTATGGATCACCCAGTGGCTGTTTCTGAGATACAAGTCAATAGTGGGACGCAGATTCTGT GTGCCTGGAATGCATTTCCAGTGTGCTCCAAAGCTCAATGGAGACTCTCAGGCAAAAGTT CAACGGATTCTACGATTGATTTCTGGTGGTGGATTGTCCATAACTGGATCACATATCTTA TGTGGAGACTTCCTCTTCAGCGGTCACACGGTTACGCTGACACTGACTTATTTGTTCATC GCCGGGATCATCTGCATTCTTGTAGCACACGAACACTACACTATCGATGTGATCATTGCT TATTATATCACAACACGACTGTTTTGGTGGTACCATTCAATGGCCAATGAAAAGAACTTG AAGGTCTCTTCACAGACTAATTTCTTATCTCGAGCATGGTGGTTCCCCCATCTTTTATTTT TTTGAGAAAATGTACAAGGCTCAATTCCTTGCTGCTTCTCCTGGCCGCTGTCTTGGCCT CCTGGCTGCTTCAAATCATCATGCAAAAAGTATTCACGGGTTCAGAAGATTGGTGAAGAC

AATGAGAAATCGACCTGA

Restriction Sites: Please inquire ACCN: NM 001136258

Insert Size: 5500 bp



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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: The ORF of this clone has been fully sequenced and found to be a perfect match to

NM_001136258.1.

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 001136258.1, NP 001129730.1</u>

 RefSeq Size:
 6162 bp

 RefSeq ORF:
 1098 bp

 Locus ID:
 166929

 UniProt ID:
 Q8NHU3

Cytogenetics: 4q25

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Metabolic pathways, Sphingolipid metabolism

Gene Summary: Sphingomyelin, a major component of cell and Golgi membranes, is made by the transfer of

phosphocholine from phosphatidylcholine onto ceramide, with diacylglycerol as a side product. The protein encoded by this gene is an enzyme that catalyzes this reaction primarily at the cell membrane. The synthesis is reversible, and this enzyme can catalyze the reaction in either direction. The encoded protein is required for cell growth. Three transcript variants encoding the same protein have been found for this gene. There is evidence for more

variants, but the full-length nature of their transcripts has not been determined.[provided by

RefSeq, Oct 2008]

Transcript Variant: This variant (3) differs in the 5' UTR compared to variant 1. All three

variants encode the same protein.