

## **Product datasheet for SC334722**

## OriGene Technologies, Inc.

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## Ceramide synthase 1 (CERS1) (NM\_001290265) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Ceramide synthase 1 (CERS1) (NM\_001290265) Human Untagged Clone

Tag: Tag Free

Symbol: Ceramide synthase 1

Synonyms: EPM8; GDF-1; GDF1; LAG1; LASS1; UOG1

**Mammalian Cell** 

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001290265, the custom clone sequence may differ by one or

more nucleotides

ATGCCCGAGAGCGCTTGGAAGTTTCTCTTCTACCTGGGCAGCTGGAGCTACAGTGCCTACCTGCTGTTTTG
GCACCGACTACCCCTTCTTCCATGACCCACCATCTGTCTTCTACGACTGGACGCCGGGCATGGCAGTGCC
ACGGGACATTGCAGCCGCCTACCTGCTCCAGGGAAGCTTCTATGGCCACTCCATCTACGCTACAC
ATGGACACCTGGCGCAAGGACTCGGTGGTCATGCTCCCACCACGTGGTCACTCTCATCCTCT
CCTCCTACGCCTTCCGGTACCACAATGTGGGCATCCTTGTGCTCTTCCTGCACGATATCAGTGACGTGCA
GCTTGAGTTCACCAAGCTCAACATTTACTTCAAGTCCCGCGGGGCTCCTACCATCGGCTGCATGCCTTG
GCAGCAGACTTGGGCTGCCTCAGCTTCAGCTTGGTTCCGCCTCTACTGGTTCCCGCTCA
AGGTCCTGTATGCCACCAGTCACTGCAGTCTGCGCACGGTGCCTGACATCCCCTTCTACTTCTTCAA
TGCGCTCCTGCTGCTGCTCACCCTTATGAACCTCTACTGGTTCCTGTACACTCGTGGCGTTTGCAGCCAAG
GTGTTGACAGGCCAGGTGCACGAGCTGAAGGACCTGCGGGAGTATGACACAGCCCAGAGCCCAA
AGCCCAGCAAAGCCCAGTGA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM 001290265

**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).



## Ceramide synthase 1 (CERS1) (NM\_001290265) Human Untagged Clone - SC334722

**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 001290265.1</u>, <u>NP 001277194.1</u>

 RefSeq Size:
 1983 bp

 RefSeq ORF:
 720 bp

 Locus ID:
 10715

 Cytogenetics:
 19p13.11

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a ceramide synthase enzyme, which catalyzes the synthesis of ceramide,

the hydrophobic moiety of sphingolipids. The encoded enzyme synthesizes 18-carbon (C18) ceramide in brain neurons. Elevated expression of this gene may be associated with increased longevity, while decreased expression of this gene may be associated with myoclonus epilepsy with dementia in human patients. This protein is transcribed from a

monocistronic mRNA as well as a bicistronic mRNA, which also encodes growth

differentiation factor 1. [provided by RefSeq, Jul 2016]

Transcript Variant: This variant (3) is a monocistronic CERS1 transcript. Variant 3 represents the use of an alternate promoter and has multiple differences compared to variant 1, one of which results in a frameshift. Variant 3 encodes isoform 3 which has a shorter N-terminus and a distinct C-terminus compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record

were based on transcript alignments.