

Product datasheet for SC307648

OriGene Technologies, Inc.

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Ceramide synthase 1 (CERS1) (NM_198207) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Ceramide synthase 1 (CERS1) (NM_198207) 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: >SC307648 representing NM_198207.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul

ACCN: NM_198207 **Insert Size:** 1014 bp





Ceramide synthase 1 (CERS1) (NM_198207) Human Untagged Clone - SC307648

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 198207.2</u>

 RefSeq Size:
 2137 bp

 RefSeq ORF:
 1014 bp

 Locus ID:
 10715

 UniProt ID:
 P27544

 Cytogenetics:
 19p13.11

Protein Families: Druggable Genome

MW: 38 kDa

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 (2) is a monocistronic CERS1 transcript. Variant 2 uses an alternate splice pattern in the 3' end of the coding region, compared to variant 1. Variant 2 encodes isoform 2, which has a shorter and distinct C-terminus, compared to isoform 1.