

Product datasheet for SC313075

Ceramide synthase 1 (CERS1) (NM_021267) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ceramide synthase 1 (CERS1) (NM_021267) 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:	>SC313075 representing NM_021267. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC CGGATCGCC
ATGGCGGCGGGGCCCGGGCGGGCGGACGGGGCCGAGCCCATGCCGAGCTACGCGCAGCTAGTG
CAGCGCGGCTGGGGCAGCGCGCTGGCGGCGGCGGGGCTGCACGGACTGCGGCTGGGGCTGGCGCGT
CGCGGCCCTGGCTGAGCACGCGCACCTGGCGCCGCCGAGCTGCTGCTGGCGCTCGGCGCGCTGGGC
TGGACCGCCTGCGCTCCGCGGCCACTGCGCGCCTCTTTCGGCCCTGGCGAAGCGGTGCTGCCTCCAG
CCCAGAGATGCCCAAGATGCCGAGAGCGCTTGAAGTTTCTCTTCTACCTGGGCAGCTGGAGCTAC
AGTGCCTACCTGCTGTTGGCACCGACTACCCCTTCTTCCATGACCCACCATCTGTCTTCTACGACTGG
ACGCCGGCATGGCAGTGCCACGGGACATTGCAGCCGCCTACCTGCTCCAGGGAAGCTTCTATGGCCAC
TCCATCTACGCTACGCTATACATGGACACCTGGCGCAAGGACTCGGTGGT CATGTGCTCCACCACGTG
GTCACTCTCATCCTCATCGTCTCCTCCTACGCCTTCCGGTACCACAATGTGGGCATCCTTGTGCTTTC
CTGCACGATATCAGTGACGTGCAGCTTGAGTTCACCAAGCTCAACATTTACTTCAAGTCCCGCGGGC
TCCTACCATCGGCTGCATGCCTTGGCAGCAGACTTGGGCTGCCTCAGCTTCGGCTCAGCTGTTCTGG
TTCCGCCTCTACTGTTCCCGCTCAAGGTCCTGTATGCCACCAGTCACTGCAGTCTGCGCACGGTGCCT
GACATCCCCTTCTACTTCTTCTCAATGCGCTCCTGCTGCTCACCCTTATGAACCTCTACTGGTTC
CTGTACATCGTGGCCTTTCAGCCAAGGTGTTGACAGGCCAGGTGCACGAGCTGAAGGACCTGCGGGAG
TATGACACAGCCGAGGCCAGAGCCTGAAGCCCAGCAAAGCCGAGAAGCCACTGAGGAACGGCCTGTTG
AAGGACAAGCGCTTCTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites:	Sgfl-MluI
ACCN:	NM_021267



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Insert Size:	1053 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info</p>
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:	<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_021267.4
RefSeq Size:	2564 bp
RefSeq ORF:	1053 bp
Locus ID:	10715
UniProt ID:	P27544
Cytogenetics:	19p13.11
Protein Families:	Druggable Genome
MW:	39.5 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 (1) is a bicistronic transcript that includes CERS1 and GDF1 (PMID 2034669). Variant 1 encodes the longest isoform (1) of CERS1.