

Product datasheet for **MG206639**

Sgms1 (NM_144792) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sgms1 (NM_144792) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sgms1
Synonyms:	9530058O11Rik; AI841905; C80702; Mob; Sms1; Sor1; Tmem23
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG206639 representing NM_144792 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGTCTGCCAGGACCATGAAGGAAGTGGTTTACTGGTCACCCAAGAAGGTGGCAGACTGGCTGCTGG
AGAATGCTATGCCAGAATACTGTGAGCCTCTGGAGCACTTCACAGGCCAGGACTTAATCAACCTAACCCA
AGAGGATTTCAAAAACCCCACTGTACCGAGTCTCCTCTGACAATGGGCAGCGACTCTTAGACATGATA
GAGACCCTGAAGATGGAGCACCATATGGAAGCACACAAGAATGGCCACGCCAACGGACACCTCAGCATTG
GCGTTGACATTCCAACCCGATGGCAGCTTCAGCATCAAGACTAAACCAACGGAAATGCCAAATGGGTT
TAGGAAAGAGATGATCAAGATCCCATGCCAGAACCGGAGCGCTCCAGTATCCCATGGAGTGGGGCAAG
ACTTTCCTGGCCTTTCTTATGCACTTTCTGTTTTGTTCTCACTACAGTGATGATCTCGGTCTGCCATG
AACGAGTACCTCCTAAGGAGGTGCAAGCCTCCACTACCGGACACGTTTTTTGACCATTTAAACCGGGTGCA
GTGGGCGTTTTCTATTTGCGAAATTAACGGCATGATCCTTGAGGACTCTGGCTATTTCACTGGCTGCTC
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TTACAATGTATGTAACACTACCTCCAGTACCTGGCATGCATTTCAACTGTTCTCCGAAGCTTTGGAGA
CTGGGAAGCTCAAGTGCGGAGAATAATGAAGCTCATTGCTGGAGTGGCTTATCCATCACAGGCTCGCAC
AACATGTGTGGCGACTATCTGTACAGTGGCCACACGGTCATGCTAACGCTCACCTACCTATTTATCAAAG
AGTATTCTCCTCGGCGCTCTGGTGGTACCACTGGATTTGCTGGCTCCTCAGCGTGGTGAATCTTCTG
TATTCTCTTAGCGCATGACCACTACACTGTGGAGTGGTGGTGGCCTACTACATCACCAAGACTCTTC
TGGTGGTATCACAGGATGGCCAATCAGCAAGTGTAAAGGAAGCCTCCAGATGAACCTCCTGGCCAGGG
TGTGGTGTACAGGCCATTTCACTACTTTGAAAAGAATGTCCAAGGAATTGTACCTCGATCTTACCATTG
GCCCTCCCTGGCCGGTAGTCCACCTTAGTAGGCAAGTTAAATATAGCCGGCTGGTAAACGACACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG206639 representing NM_144792
 Red=Cloning site Green=Tags(s)

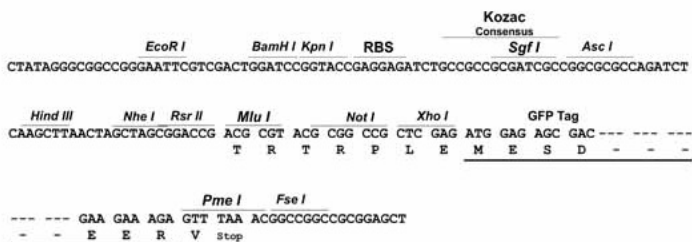
MLSARTMKEVVYVWSPKKVADWLLLENAMPEYCEPLEHFTGQDLINLTQEDFKKPPLYRVSSDNGQRLLDMI
 ETLKMEHHMEAHKNGHANGHLSIGVDIPNDGFSIKTKPNGMPNGFRKEMIKIPMPEPERSQYPMEWGK
 TFLAFLYALSCFVLTVMISVHERVPPKEVQPPLPDTFFDHFNRVQWAFSICEINGMILVGLWLFQWLL
 LKYKSIISRFFCIVGTLYLRYCITMYVTTLPVPGMHFNCSPKLFGDWEAQVRRIMKLIAGGGLSITGSH
 NMCGDYLYSGHTVMLTLTYLFIKEYSRRLWYHWCWLLSVVGIFCILLAHDHYTVDVVVAYYITTRLF
 WWYHTMANQQVLKEASQMNLLARVWYRPFQYFEKNVQGIVPRSYHWPFPWPVVHLSRQVKYSRLVNDT

TRTRPLE – GFP Tag – V

Restriction Sites:
Cloning Scheme:

SgfI-MluI

Cloning sites used for ORF Shuttling:



ACCN: NM_144792

ORF Size: 1257 bp

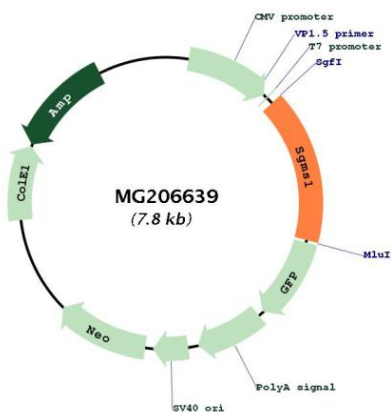
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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.

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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_144792.5</u>
RefSeq Size:	3235 bp
RefSeq ORF:	1260 bp
Locus ID:	208449
UniProt ID:	<u>Q8VCQ6</u>
Cytogenetics:	19 C1
Gene Summary:	Sphingomyelin synthases synthesize the sphingolipid, sphingomyelin, through transfer of the phosphatidyl head group, phosphatidylcholine, on to the primary hydroxyl of ceramide. The reaction is bidirectional depending on the respective levels of the sphingolipid and ceramide. Golgi apparatus SMS1 directly and specifically recognizes the choline head group on the substrate, requiring two fatty chains on the choline-P donor molecule in order to be recognized efficiently as a substrate. Major form in macrophages. Required for cell growth in certain cell types (By similarity). Suppresses BAX-mediated apoptosis and also prevents cell death in response to stimuli such as hydrogen peroxide, osmotic stress, elevated temperature and exogenously supplied sphingolipids. May protect against cell death by reversing the stress-inducible increase in levels of proapoptotic ceramide.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG206639