

Product datasheet for MR206639

Sgms1 (NM_144792) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sgms1 (NM_144792) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sgms1
Synonyms:	9530058O11Rik; AI841905; C80702; Mob; Sms1; Sor1; Tmem23
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206639 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGTCTGCCAGGACCATGAAGGAAGTGGTTTACTGGTCACCCAAGAAGGTGGCAGACTGGCTGCTGG
AGAATGCTATGCCAGAATACTGTGAGCCTCTGGAGCACTTCACAGGCCAGGACTTAATCAACCTAACCCA
AGAGGATTTCAAAAACCCCACTGTACCGAGTCTCCTCTGACAATGGGCAGCGACTCTTAGACATGATA
GAGACCCTGAAGATGGAGCACCATATGGAAGCACACAAGAATGGCCACGCCAACGGACACCTCAGCATTG
GCGTTGACATTCACACCCGATGGCAGCTTCAGCATCAAGACTAAACCAACGGAAATGCCAAATGGGTT
TAGGAAAGAGATGATCAAGATCCCATGCCAGAACCGGAGCGCTCCAGTATCCCATGGAGTGGGGCAAG
ACTTTCCTGGCCTTCTTTATGCACTTTCCTGTTTTGTTCTCACTACAGTGATGATCTCGGTCTGCCATG
AACGAGTACCTCCTAAGGAGGTGACGCCTCCACTACCGGACACGTTTTTTGACCATTTTAAACCGGTGCA
GTGGGCGTTTTCTATTTGCGAAATTAACGGCATGATCCTTGAGGACTCTGGCTATTTTCAGTGGCTGCTC
TAAAAACAAGTCTATTATTAGCAGAAGATTTTCTGCATAGTTGGCACGCTGTACCTGTATCGGTGTA
TTACAATGTATGTAACACTACCTCCAGTACCTGGCATGCATTTCAACTGTTCTCCGAAGCTTTGGAGA
CTGGGAAGCTCAAGTGCGGAGAATAATGAAGCTCATTGCTGGAGTGGCTTATCCATCACAGGCTCGCAC
AACATGTGTGGCGACTATCTGTACAGTGGCCACACGGTCATGCTAACGCTCACCTACCTATTTATCAAAG
AGTATTCTCCTCGCGGCTCTGGTGGTACCACTGGATTTGCTGGCTCCTCAGCGTGGTGAATCTTCTG
TATTCTCTTAGCGCATGACCACTACACTGTGGAGTGGTGGTGGCCTACTACATCACCAAGACTCTTC
TGGTGGTATCACAGGATGGCCAATCAGCAAAGTGTAAAGGAAGCCTCCAGATGAACCTCCTGGCCAGGG
TGTGGTGTACAGGCCATTTAGTACTTTGAAAAGAATGTCCAAGGAATTGTACCTCGATCTTACCATTG
GCCCTCCCTGGCCGGTAGTCCACCTTAGTAGGCAAGTTAAATATAGCCGGCTGGTAAACGACACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR206639 protein sequence
 Red=Cloning site Green=Tags(s)

MLSARTMKEVVYWSPKKVADWLLLENAMPEYCEPLEHFTGQDLINLTQEDFKKPLLYRVSSDNGQRLLDMI
 ETLKMEHHMEAHKNGHANGHLSIGVDIPNDGFSIKTKPNGMPNGFRKEMIKIPMEPEPERSQYPMWGWK
 TFLAFLYALSCFVLTVMISVHHERVPPKEVQPPLPDTFFDFHNRVQWAFSICEINGMILVGLWLFQWLL
 LKYKSIISRFFCIVGTLTYLYRCITMYVTTLVPGMHFNCSPKLFGDWEAQVRRIMKLIAGGGLSITGSH
 NMCGDYLYSGHTVMLTLTYLFIKEYSPRRLWYHWCWLLSVVGI FCILLAHDHYTVDVVVAYYITTRLF
 WWYHTMANQQVLKEASQMNLLARVWYRPFQYFEKNVQGIVPRSYHWPFPWPVVHLSRQVKYSRLVNDT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_144792

ORF Size: 1260 bp

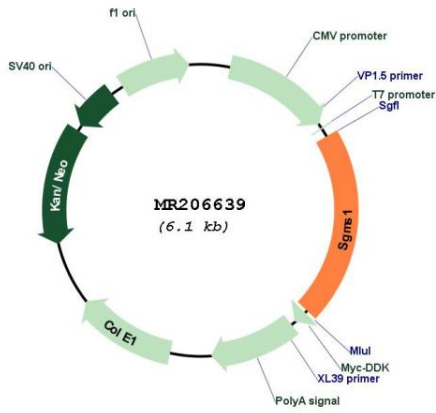
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	3624 bp
RefSeq ORF:	1260 bp
Locus ID:	208449
UniProt ID:	<u>Q8VCQ6</u>
Cytogenetics:	19 C1
MW:	49.3 kDa
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 MR206639