

Product datasheet for RR211313L3

Sgms2 (NM_001014043) Rat Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sgms2 (NM_001014043) Rat Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	Sgms2
Synonyms:	RGD1305778; spermatin
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR211313).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

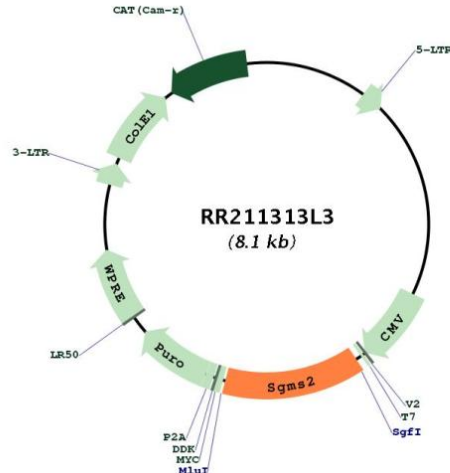
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.



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Plasmid Map:


ACCN: NM_001014043

ORF Size: 1095 bp

OTI Disclaimer: 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:

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_001014043.1](#), [NP_001014065.1](#)

RefSeq Size: 1924 bp

RefSeq ORF: 1098 bp

Locus ID: 310849

UniProt ID: [Q4JM44](#)

Cytogenetics: 2q43

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. Plasma membrane SMS2 can also convert phosphatidylethanolamine (PE) to ceramide phosphatidylethanolamine (CPE). Major form in liver. Required for cell growth in certain cell types. Regulator of cell surface levels of ceramide, an important mediator of signal transduction and apoptosis. Regulation of sphingomyelin (SM) levels at the cell surface affects insulin sensitivity (By similarity).[UniProtKB/Swiss-Prot Function]