

## Product datasheet for **RR208109**

### Sptssa (NM\_001047743) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sptssa (NM\_001047743) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Sptssa  
**Synonyms:** Ssspta  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR208109 representing NM\_001047743  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

**ATGGCGGGCATGGCGTTGGCGCGAGCATGGAAGCAGATGCTCTGGTTCTACTACCACTACTTGCTGGTCA**  
**CTGCGCTCTACATGCTGGAGCCCTGGGAGCGAACCCTGTTCAATTCGATGCTGGTTCTGTGGTGGGGAT**  
**GGCACTGTACACCGGCTACGTCTTCATGCCCCAGCACATCATGGCAATACTGCATTACTTTGAAATTGTA**  
**CAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR208109 representing NM\_001047743  
Red=Cloning site Green=Tags(s)

MAGMALARAWKQMSWFYYQYLLVTALYMLEPWERTVFNSMLVSVGMALYTG YV FMPQHIMAILHYFEIV  
Q

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

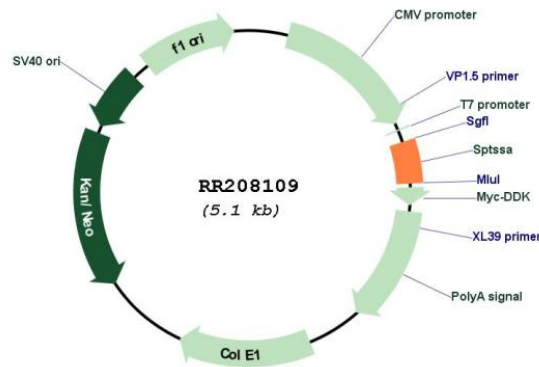


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_001047743

ORF Size: 213 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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001047743.1, NP_001041208.1</u>
<b>RefSeq Size:</b>	1276 bp
<b>RefSeq ORF:</b>	216 bp
<b>Locus ID:</b>	500651
<b>UniProt ID:</b>	<u>Q4G019</u>
<b>Cytogenetics:</b>	6q23
<b>MW:</b>	8.5 kDa
<b>Gene Summary:</b>	Stimulates the activity of serine palmitoyltransferase (SPT). The composition of the serine palmitoyltransferase (SPT) complex determines the substrate preference. The SPTLC1-SPTLC2-SPTSSA complex shows a strong preference for C16-CoA substrate, while the SPTLC1-SPTLC3-SPTSSA isozyme uses both C14-CoA and C16-CoA as substrates, with a slight preference for C14-CoA. Plays a role in MBOAT7 location to mitochondria-associated membranes (MAMs), may be involved in fatty acid remodeling phosphatidylinositol (PI). [UniProtKB/Swiss-Prot Function]