

## Product datasheet for **RG216310**

### SPTLC1 (NM\_178324) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SPTLC1 (NM\_178324) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** SPTLC1  
**Synonyms:** HSAN1; HSN1; LBC1; LCB1; SPT1; SPTI  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG216310 representing NM\_178324  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGACCGCCACGGAGCAGTGGTCTGGTGGAGATGGTACAGGCGCTTACGAGGCTCCTGCTTACC  
ATCTTATTTTGAAGGGATTCTGATCCTCTGGATAATCAGACTTCTTTCTCTAAGACTTACAAATTACA  
AGAACGATCTGATCTTACAGTCAAGGAAAAGAAGAACTGATTGAAGAGTGGCAACCAGAACCTCTGTT  
CCTCCTGTCCAAAAGACCATCCTGCTCTCAACTACAACATCGTTTCAGGCCCTCAAGCCACAAAAGT  
TGTTGAATGGAAAAGAATGTATAAACTCGCCTCATTTAATTTCTTGGATTGTTGGATAACCCTAGGGT  
TAAGGCAGCAGCTTTAGCATCTCTAAAGAAGTATGGCGTGGGACTTGTGGACCCAGAGGATTTTATGGC  
ACATTTGAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG216310 representing NM\_178324  
Red=Cloning site Green=Tags(s)

MATATEQWLVEMVQALYEAPAYHLILEGILILWIIRLLFSKTYKLQERSDLTVKEKEELIEEWQPEPLV  
PPVPKDPALNYNIVSGPPSHKTVVNGKECINFASFNFLGLLDNPRVKAALASLKKYGVGTGPRGFYV  
TFE

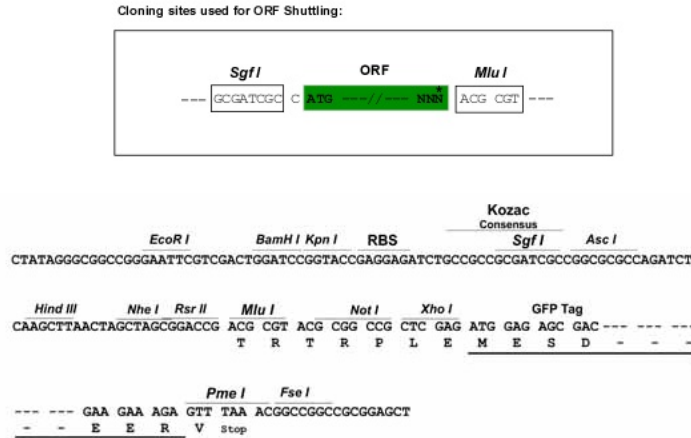
**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI

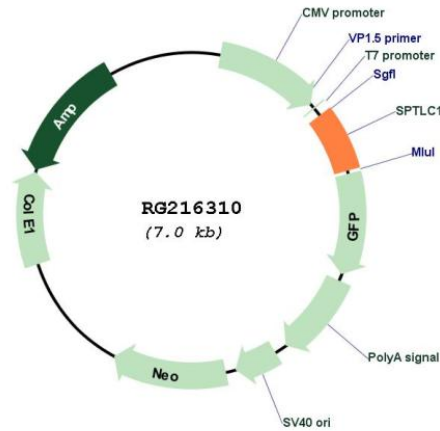


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_178324

ORF Size: 429 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.

<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_178324.3</u>
<b>RefSeq Size:</b>	998 bp
<b>RefSeq ORF:</b>	432 bp
<b>Locus ID:</b>	10558
<b>UniProt ID:</b>	<u>O15269</u>
<b>Cytogenetics:</b>	9q22.31
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Metabolic pathways, Sphingolipid metabolism
<b>Gene Summary:</b>	This gene encodes a member of the class-II pyridoxal-phosphate-dependent aminotransferase family. The encoded protein is the long chain base subunit 1 of serine palmitoyltransferase. Serine palmitoyltransferase converts L-serine and palmitoyl-CoA to 3-oxosphinganine with pyridoxal 5'-phosphate and is the key enzyme in sphingolipid biosynthesis. Mutations in this gene were identified in patients with hereditary sensory neuropathy type 1. Alternatively spliced variants encoding different isoforms have been identified. Pseudogenes of this gene have been defined on chromosomes 1, 6, 10, and 13. [provided by RefSeq, Jul 2013]