

Product datasheet for **RG222985**

SPTLC1 (NM_006415) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPTLC1 (NM_006415) 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)



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ORF Nucleotide Sequence:

>RG222985 representing NM_006415
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGACCGCCACGGAGCAGTGGTCTGGTGGAGATGGTACAGCGCTTACGAGGCTCTGCTTACC
 ATCTTATTTTGAAGGGATTCTGATCCTCTGGATAATCAGACTTCTTTTCTAAGACTTACAAATTACA
 AGAACGATCTGATCTTACAGTCAAGGAAAAAGAAGAACTGATTGAAGAGTGGCAACCAGAACCTCTGT
 CCTCTGTCCAAAAGACCATCTGCTCTCAACTACAACATCGTTTCAGGCCCTCAAGCCACAAAAGT
 TGGTGAATGGAAGAATGTATAAACTTCGCCTCATTTAATTTTCTGGATTGTTGGATAACCTAGGGT
 TAAGGCAGCAGCTTAGCATCTAAAGAAGTATGGCGTGGGACTTGTGGACCCAGAGGATTTTATGGC
 ACATTTGATGTTCAATTTGGATTTGGAAGACCGCTGGCAAATTTATGAAGACAGAAGAAGCCATTATAT
 ACTCATATGGATTTGCCACCATAGCCAGTGTATTCTGCTTACTCTAAAAGAGGGGACATTGTTTTTGT
 AGATAGAGCTGCCTGCTTTGCTATTCAGAAAGGATTACAGGCATCCCGTAGTGACATTAAGTTATTTAAG
 CATAATGACATGGCTGACCTCGAGCGACTACTAAAAGAACAAGAGATCGAAGATCAAAGAATCCTCGCA
 AGGCTCGTGAACCTCGCGTTCATTGTAGTAGAAGGATTGTATATGAATACTGGAACTATTTGCTCT
 TCCAGAATTGGTTAAGTTAAAATACAAATACAAAGCAAGAATCTTCTGGAGGAAAGCCTTTTCAATTTGGA
 GTCCTAGGAGAGCATGGCCGAGGAGTCACTGAACACTATGGAATCAATATTGATGATATTGATCTTATCA
 GTGCCAACATGGAGAATGCATTGCTTCTATTGGAGGTTTCTGCTGTGGCAGGTCTTTTGTAAATTGACCA
 TCAGCGACTTCCGGCCAGGGA TACTGCTTTTCAGCTTCGTTACCTCCCCTGTTAGCTGCTGCAGCAATT
 GAGGCCCTCAACATCATGGAAGAGAATCCAGGTATTTTGCAGTGTGAAGGAAAAGTGGGACAAAATTC
 ATAAAGCTTACAAGCATTTCTGGATTTAAAAGTGGTGGGGAGTCCCTTTCTCCAGCCTTCCACTACA
 ACTGGAAGAGAGCACTGGGTCTCGCGAGCAAGATGTCAGACTGCTTCAGGAAATTTAGATCAATGCATG
 AACAGAAGTATTGCATTAACCTAGGCGCCTACTTGGAGAAAGAAGAGAAGTGTCTCCCTCCTCCAGCA
 TTCGGGTTGTGGTACGGTGAACAACAGAGGAAGAACTGGAGAGAGCTGCGTCCACCATCAAGGAGGT
 AGCCAGGCCGCTCTGCTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG222985 representing NM_006415
 Red=Cloning site Green=Tags(s)

MATATEQWVLVEMVQALYEAPAYHLILEGILILWIIRLLFSKTYKLQERSDLTVKEKEELIEEWQPEPLV
 PPVPKDHPALNYNIVSGPPSHKTVVNGKECINFASFNGLLDNPRVKAALASLKKYGVGTCGPRGYG
 TFDVHLDLEDRLAKFMKTEEAIIYSYGFATIASAIPAYSKRGDIVFVDRAACFAIQKGLQASRSDIKLKF
 HNDMADLERLLKEQEI EDQKNPRKARVTRRFIVVEGLYMNTGTICPLPELVKLYKARIFLEESLSFG
 VLGEHGRGVTEHYGINIDDLISANMENALASIGGFCCGRSFVIDHQRLSGQGYCF SASLPPLLA AAAI
 EALNIMEENPGIFAVLKEKCGQIHKALQGISGLKVVGESLSPAFHLQLEESTGSREQDVRLQLQEIVDQCM
 NRSIALTQARYLEKEEKCLPPPSIRVVVTVEQTEEELERAASTIKEVAQAVLL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_006415

ORF Size: 1419 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_006415.4](#)

RefSeq Size: 2780 bp

RefSeq ORF: 1422 bp

Locus ID: 10558

UniProt ID: [O15269](#)

Cytogenetics: 9q22.31

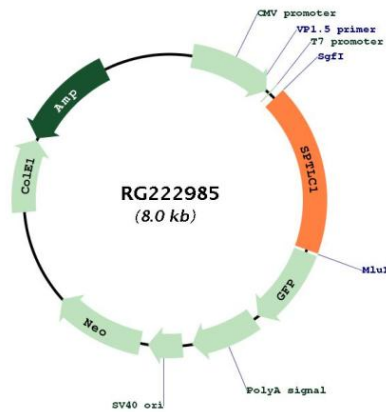
Domains: aminotran_1_2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Metabolic pathways, Sphingolipid metabolism

Gene Summary: 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]

Product images:



Circular map for RG222985