

Product datasheet for **MR208957**

Sgpl1 (NM_009163) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sgpl1 (NM_009163) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sgpl1
Synonyms:	A1428538; D10Xrf456; S1PL; Spl
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208957 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCCGAACCGACCTCCTCAAGCTGAAGGACTTCGAGCCTTATTTGGAGATTTTGAATCATATTCCA
 CAAAAGCCAAGAATTATGTGAATGGATATTGCACCAAATATGAGCCCTGGCAGCTCATTGCGTGGAGTGT
 CCTGTGTA CTCTGCTGATAGTCTGGGTGTATGAGCTTATCTCCAGCCAGAGAGTTTATGGTCTCGGTTT
 AAAAAAAAAATTATTAAGCTTATCAGGAAGATGCCATTTATTGGACGTAAGATCGAACACAGGTGAGCA
 AAGCCAAGAAGGATCTTGTCAAGAACATGCCATTCCTAAAGGTGGACAAGGATTATGTGAAAACCTGCC
 TGCTCAGGGTATGGGCACAGCTGAGGTTCTGGAGAGACTCAAGGAGTACAGCTCCATGGATGGTCTCTGG
 CAAGAAGGGAAAGCCTCAGGAGCTGTGTACAATGGGGAACCGAAGCTCACGGAGCTGCTGGTGCAGGCTT
 ATGGAGAATTCAGTGGAGCAATCCACTGCATCCAGATATCTCCCTGGATTGCGGAAGTTAGAGGCAGA
 AATCGTTAGGATGACTTGTCCCTCTTCAATGGGGGACCAGATTCCTGTGGATGTGTGACTTCTGGGGGA
 ACGGAAAGCATCCTGATGGCCTGCAAAGCTTACCGGGACTTGGCGTTAGAGAAGGGGATCAAACCTCCAG
 AAATTGTGGCTCCCGAGAGTGCCCATGTGCAATTCGACAAAGCAGCTCATTATTTGGGATGAAGATTGT
 CCGAGTTGCACTGAAAAAGAACATGGAGGTGGATGTGCAGGCAATGAAGAGAGCCATCTCCAGGAACACA
 GCTATGCTGGTCTGTTCTACCCACAGTTTCTCATGGTGTGATGGATCCTGTCCCCGAAGTGGCCAAGT
 TGGCTGTCAGATATAAAATCCCACTCCATGTGGATGCTTGTCTGGGGGGCTTCTCATTGTCTTCATGGA
 GAAAGCAGGGTACCCACTGGAGAAACATTTGATTTCCGGGTGAAAGGTGTGACCAGCATTTACAGCAGAT
 ACTCATAAGTATGGCTATGCTCCTAAAGGTTATCAGTGGTGTACTCTAACGAGAAGTACAGGACGT
 ACCAGTCTTTTGTGGTGCAGACTGGCAAGGTGGTGTCTACGCATCTCCAAGCATAGCTGGCTCACGGCC
 TGGTGGCATCATTGCAGCCTGTTGGGCCGCTTATGCACTTCGGTGAGAACGGCTATGTTGAAGCTACC
 AAACAGATCATAAAACCTGCTCGCTTCTGAAAGTCAGAACTGGAAAACATCAAAAACATCTTCAATTTTCG
 GTGATCCTCAATTGTGAGTATTGCTCTGGGATCCAACGATTTTGACATTTACCGACTATCTAATATGAT
 GTCTGCTAAGGGGTGGAATTTAACTACCTGCAGTTCCCAAGAAGCATTCTTTCTGCATTACGTTAGTA
 CATACTCGGAAGCGAGTGGCGATCCAGTTCCTAAAGGATATCCGGGAATCAGTACACAAATCATGAAGA
 ATCCTAAAGCTAAGACCACAGGAATGGGTGCCATCTATGGCATGGCCAGGCAACCATTGACAGGAAGCT
 GGTTCAGAAAATCCTCCGTCTTCTGGACTGCCTTTATACTACGGACCCCGTACTCAGGGCAACCAG
 ATGAACGGTTCTCAAAGCCCCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208957 protein sequence
 Red=Cloning site Green=Tags(s)

MPGTDLLKDKFEPYLEILESSTKAKNYVNGYCTKYEPWQLIAWSVLCTLLIVVWYELIFQPELWSRF
 KKKLFLKIRKMPFIQRKIEQQVSKAKKDLVKNMPFLKVDKDYVKTLPAQGMGTAEVLERLKEYSSMDGSW
 QEGKASGAVYNGEPKLELLVQAYGEFTWSNPLHPDIFPGLRLEAEIVRMTCSLFNGGPDSCGCVTSGG
 TESILMACKAYRDLALEKGIKTPDIVAPESAHAADFKAHYFGMKIVRVALKKNMEVDVQAMKRAISRNT
 AMLVCSTPQPHGVMDPVPEVAKLAVRYKIPLHVDACLGGFLIVFMEKAGYPLEKPFDFRVKGVTSISAD
 THKYGYAPKSSVVMYSNEKYRTRYQFFVGADWQGGVYASPSIAGSRPGGIIAACWAALMHFGENGYVEAT
 KQIIKTARFLKSELENIKNIFIFGDPQLSVIALGSNDFDIYRLSNMMSAKGWNFNLYLQFPRSIHFCTLV
 HTRKRVAIQFLKDIRESVTQIMKNPKAKTTGMGAIYGMAQATIDRKLVAEISSVFLDCLYTTDPVTQGNQ
 MNGSPKPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_009163

ORF Size: 1707 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_009163.4](#)

RefSeq Size: 4133 bp

RefSeq ORF: 1707 bp

Locus ID: 20397

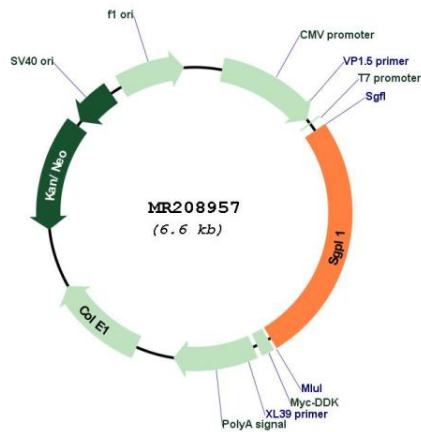
UniProt ID: [Q8R0X7](#)

Cytogenetics: 10 32.14 cM

MW: 63.7 kDa

Gene Summary: Cleaves phosphorylated sphingoid bases (PSBs), such as sphingosine-1-phosphate, into fatty aldehydes and phosphoethanolamine (PubMed:9464245, PubMed:20097939). Elevates stress-induced ceramide production and apoptosis (PubMed:9464245). Required for global lipid homeostasis in liver and cholesterol homeostasis in fibroblasts (PubMed:20097939, PubMed:28262793). Involved in the regulation of pro-inflammatory response and neutrophil trafficking (PubMed:21173151). Modulates neuronal autophagy via phosphoethanolamine production which regulates accumulation of aggregate-prone proteins such as APP (PubMed:28521611). Seems to play a role in establishing neuronal contact sites and axonal maintenance (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR208957