

Product datasheet for **MG208957**

Sgpl1 (NM_009163) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sgpl1 (NM_009163) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sgpl1
Synonyms:	A1428538; D10Xrf456; S1PL; Spl
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208957 representing NM_009163
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCCGAACCGACCTCCTCAAGCTGAAGGACTTCGAGCCTTATTTGGAGATTTTGAATCATATTCCA
 CAAAAGCCAAGAATTATGTGAATGGATATTGCACCAAATATGAGCCCTGGCAGCTCATTGCGTGGAGTGT
 CCTGTGTAAGTCTGCTGATAGTCTGGGTGTATGAGCTTATCTCCAGCCAGAGAGTTTATGGTCTCGGTTT
 AAAAAAATTATTTAAGCTTATCAGGAAGATGCCATTTATTGGACGTAAGATCGAACACAGGTGAGCA
 AAGCCAAGAAGGATCTTGTCAAGAACATGCCATTCCTAAAGGTGGACAAGGATTATGTGAAAACCTGCC
 TGCTCAGGGTATGGGCACAGCTGAGGTTCTGGAGAGACTCAAGGAGTACAGCTCCATGGATGGTTCTGG
 CAAGAAGGAAAGCCTCAGGAGCTGTGTACAATGGGGAACCGAAGCTCACGGAGCTGCTGGTGCAGGCTT
 ATGGAGAATTCAGTGGAGCAATCCACTGCATCCAGATATCTCCCTGGATTGCGGAAGTTAGAGGCAGA
 AATCGTTAGGATGACTTGTCCCTCTTCAATGGGGGACCAGATTCCTGTGGATGTGTGACTTCTGGGGGA
 ACGGAAAGCATCCTGATGGCCTGCAAAGCTTACCGGGACTTGGCGTTAGAGAAGGGGATCAAACCTCCAG
 AAATTGTGGCTCCCGAGAGTGCCATGTGCTGCAATTCGACAAAGCAGCTCATTATTTGGGATGAAGATTGT
 CCGAGTTGCACTGAAAAAGAACATGGAGGTGGATGTGCAGGCAATGAAGAGAGCCATCTCCAGGAACACA
 GCTATGCTGGTCTGTTCTACCCACAGTTTCTCATGGTGTGATGGATCCTGTCCCCGAAGTGGCCAAGT
 TGGCTGTCAGATATAAAATCCACTCCATGTGGATGCTTGTCTGGGGGGCTTCTCATTGTCTTCATGGA
 GAAAGCAGGGTACCCACTGGAGAAACATTTGATTTCCGGGTGAAAGGTGTGACCAGCATTTACAGCAGAT
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 ACCAGTCTTTTGTGGTGCAGACTGGCAAGGTGGTGTCTACGCATCTCCAAGCATAGCTGGCTCACGGCC
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 AAACAGATCATAAAACCTGCTCGCTTCTGAAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCA
 AAAAAACATCTTCAATTTTCG
 GTGATCCTCAATTGTCAGTTATTGCTCTGGGATCCAACGATTTTGACATTTACCGACTATCTAATATGAT
 GTCTGCTAAGGGGTGGAATTTAACTACCTGCAGTTCCCAAGAAGCATTCTTTCTGCATTACGTTAGTA
 CATACTCGGAAGCGAGTGGCGATCCAGTTCCTAAAGGATATCCGGGAATCAGTACACAAATCATGAAGA
 ATCCTAAAGCTAAGACCACAGGAATGGGTGCCATCTATGGCATGGCCAGGCAACCATTGACAGGAAGCT
 GGTTCAGAAAATCCTCCGTCTTCTGGACTGCCTTTATACTACGGACCCCGTACTCAGGCAACCAG
 ATGAACGGTTCTCAAAGCCCCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG208957 representing NM_009163
 Red=Cloning site Green=Tags(s)

MPGTDLLKDKDFEPYLEILESSTYKAKNYVNGYCTKYEPWQLIAWSVLCTLLIVVWYELIFQPESLWSRF
 KKKLFLKIRKMPFIGRKIEQVSKAKKDLVKNMPFLKVDKDYVKTLPAQGMGTAEVLERLKEYSSMDGSW
 QEGKASGAVYNGEPKLELLVQAYGEFTWSNPLHPDIFPGLRKLAEIVRMTCSLFNGGPDSCGCVTSGG
 TESILMACKAYRDLALEKIKTPEIVAPESAHAAFDKAAHYFGMKIVRVALKKNMEVDVQAMKRAISRNT
 AMLVCSTPQFPHGVMVPVEVAKLAVRYKIPLHVDACLGGFLIVFMEKAGYPLEKPFDFRVKGVTSISAD
 THKYGYAPKSSVVMYSNEKYRTYQFFVGADWQGGVYASPSIAGSRPGGIIAACWAALMHFGENGYVEAT
 KQIIKTARFLKSELENIKNIFIFGDPQLSVIALGSNDFDIYRLSNMMSAKGWNFNLYQFPRSIHFCTLV
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 MNGSPKPR

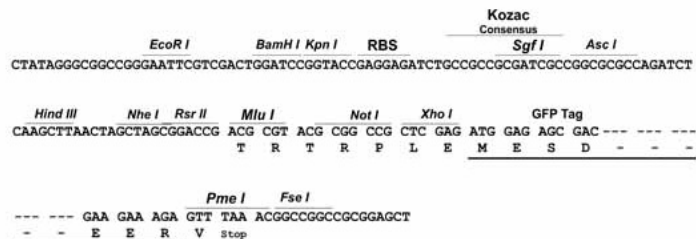
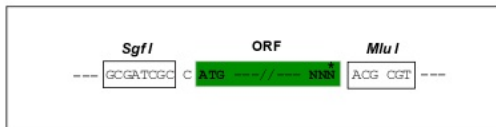
TRTRPLE - GFP Tag - V

Restriction Sites:

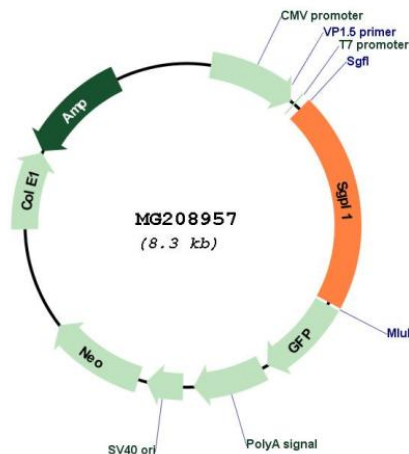
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_009163
 ORF Size: 1704 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:	<ol style="list-style-type: none">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:	4108 bp
RefSeq ORF:	1707 bp
Locus ID:	20397
UniProt ID:	Q8R0X7
Cytogenetics:	10 32.14 cM
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]