

Product datasheet for **MG205386**

Sgpp2 (BC049995) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sgpp2 (BC049995) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Sgpp2
Synonyms: SPPase2, Spp2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG205386 representing BC049995
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCGAAGCTGCGGAGCCTGCGGGATTACAGCTCGTGCGCGCTTCCAGCGCCGCTGCGGGCTCT
 TCCAGCGCGGGAGGCTTCTGGAGAGGAGCATGTGGTGAAGAATTATTTCTACTATTACCTGTTCCGGTT
 TTCAGCCGCTTTGGGCCAGGAAGTGTCTACATCACGTTTCTCCCTTTCACCCACTGGAATATCGACCT
 AATTTGTCCAGAAGATTGGTTGTGATATGGTTTTGGTGTATATTGGCCAGGTGGCCAAGGACATCC
 TGAAGTGGCCCCGGCCCTCTTCTCCGTTGTGAGACTTGAAAAGAGAATTATTGCAGAGTACGGAAT
 GCCATCCACCCACGCCATGGCGGCCACCGCCATCTCCTTACCCTCCTCATCTCTACCATGGACCGGAT
 CAGTACCTTTTTATTTAGGCCTGATGATGGCTGTGGTGTCTCTACGCTGGTGTGTCTCAGCAGACTCT
 ACACGGGGATGCACACGGTCTGGATATCTGGGTGGCGTTCTGATCACTGCAGTCTCATTGCTCTGAC
 CTACCCTGCCTGGACCTCATCGACTCCCTGGACTCTGCCAGCCCCCTTCCCTGTGTGTGCATAGTT
 GTACCGTTCCTTGTGCTACAATTACCCTGTGTCTGACTACTACAGCCCAGCAGGGCAGACACCA
 CCATCGTGGCTGCTGGGGCTGGAGTGACCCTGGGATTCTGGATCAACATTTCTCCAGCTCGTGTCAA
 GCCACCCCATCTTCTGTGCTCATTGAAACATCCACCCCTTACCACTGACATGCTGGTTTTAGGCTG
 ACCAAATTTATGGTGGGAATCATGTTGATCCTCTTGGTTCGCAACTGGTGCAAAAGCTCTCCCTGCAAG
 TATTATTCTCATGGTTCAAGGTGGTACTAGGAACAAGGAGGCCAGGCGAAGACTAGAGATTGAAGTCCC
 TTACAAGTTTGTACCTACACATCTGTTGGCATCTGTGCCACAACCTTTGTGCCAATGTTGCACAGGTTT
 TTGGGATTGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG205386 representing BC049995
 Red=Cloning site Green=Tags(s)

MAELLRSLRDSQLVARFQRRCLFPAREASGEEHVKNYFYLYLFRFSAALGQEVFYITFLPFTHWNIDP
 NLSRRLVVIWVLYMYIGQVAKDILKWPRPSFPPVVRLEKRIIAEYGMPPSTHAMAATAISFTLLISTMDRY
 QYPFILGLMMAVVFSTLVCLSRLYTGMHTVLDILGGVLIITAVLIALTYPATLIDSLDSASPLFPVCVIV
 VPFLLCYNYPVSDYYSPTRADTTTIVAAGAGVTLGFWINHHFFQLVSKPTPSLPVIQNIPLTTDMLVGL
 TKFMVGMILLVRLVQKLSLQVLFSWFKVVTNRNKEARRRLEIEVPYKFVITYTSVIGCATTFVPMLHRF
 LGLL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: BC049995

ORF Size: 1064 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: [BC049995](#), [AAH49995](#)

RefSeq Size: 4030 bp

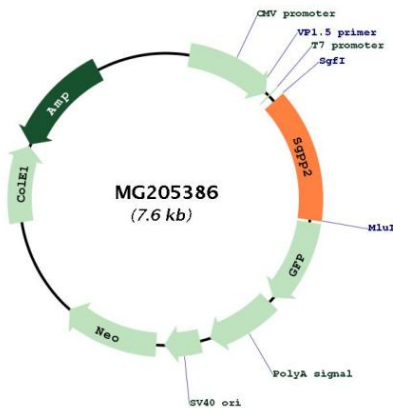
RefSeq ORF: 1064 bp

Locus ID: 433323

Cytogenetics: 1 C4

Gene Summary: Has specific phosphohydrolase activity towards sphingoid base 1-phosphates. Has high phosphohydrolase activity against dihydrosphingosine-1-phosphate and sphingosine-1-phosphate (S1P) in vitro (Probable). Sphingosine-1-phosphate phosphatase activity is needed for efficient recycling of sphingosine into the sphingolipid synthesis pathway (By similarity). May play a role in attenuating intracellular sphingosine 1-phosphate (S1P) signaling. May play a role in pro-inflammatory signaling (By similarity). Plays a role in the regulation of pancreatic islet beta-cell endoplasmic reticulum stress and proliferation (PubMed:27059959). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG205386