

## Product datasheet for RR209901

### Sphk1 (NM\_133386) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sphk1 (NM_133386) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sphk1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR209901 representing NM_133386 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAACCAGCAGACTGTCCCCGGGGACTGCTCCACGGCCATGCAGAGTGTGGTGCTGCTGAACCCC  
GGGGTGGCAAGGGCAAGGCTCTGAAGCTTTTCAGAGCCGTGTGCGGCCCTTCTGGAGGAGGCTGAGGT  
ATCCTTTAAACTGATGCTCACGAACGGCAGAACCATGCCAGGGAGCTGGTGTGTGCAGAAGAAGTGGGT  
CACTGGGATGCCTTGGCGGTCAATGTCGGGTGACGGTCTGATGCACGAGGTGGTGAATGGCTAATGGAAC  
GACCTGACTGGGAGAGTGCCATCCAGAAACCCCTATGTAGCCTCCCTGGAGGCTCTGGCAATGCGCTGGC  
AGCTTCTTTGAACACTATGCTGGGCACGAGCAGGTCACTAATGAAGATCTCCTGATCAACTGCACACTG  
CTGTTATGCTGCCGGCAGCTGTACCCATGAATCTGCTGTCCCTGCACACCGCTTCCGGACGGCAACTCT  
ATTCTGTTCTCAGTCTGTCTGGGGTTTCGTTGCTGACGTGGACTTGGAGAGTGAGAAATACAGGAGCTT  
GGGGGAGATTCGTTTACGGTGGGAACCTTTTTTCGCCTAGCAAGCCTGCGCATTACCAAGGCCAACTG  
GCCTACCTTCTGTAGGGAAGGCTGCCTCTAAGATACCTGCTTCCCTCACTGGCACAGAAGGGCCCTGCCA  
ACACATACCTCGTTCCTCTGGAGGAGCCAGTGCCACCTCATTGGACTGTGGTGCCAGAGCAGGACTTCGT  
TCTGGTGTGGTGTCTTACACCCACCTGAGCACAGAGATGTTTGCAGACCCATGGGCCGCTGCGAG  
GCTGGTGTATGCATCTGTTCTATATACGTGCGGGGGTCAAGGGCCATGCTGCTGCGCCTCTTCTGG  
CCATGCAGAAGGGCAAGCATATGGACCTCGACTGCCCGTACTTGGTTCATGTGCCAGTGGTTGCCTCCG  
CCTGGAACCCAGGAACCAGAGGGGAGTGTCTTCTGTTGGACGGGGAGCTGATGGTGTGTGAAGCTGTGCAG  
GGCCAAGTGACCCAAACTACCTTTGGATGGTCTCTGGTAGCAGTGACTCCCGTCCGGCCGGGACTCCC  
AGCGGAGGCCACCTCCAGAAGAACCAATA

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR209901 representing NM\_133386  
Red=Cloning site Green=Tags(s)

MQPADCPRGLLPRPCRVLVLLNPRGGKALKLFQSRVRPLLEAEVSFKMLLTERQNHARELVCAEELG  
HWDALAVMSGDGLMHEVVNGLMERPDWESAIQKPLCSLPGGSGNALAASLNYYAGHEQVTNEDLLINCTL  
LLCCRQLSPMNL LSLHTASGRQLYSVL SL SWGFVADVDLESEKYRSLGEIRFTVGTFFRLASLRIYQGQL  
AYLPVGKAASKIPASSLAQKGPANTYL VPLEEPVPPHWTVVPEQDFVLVLVLLHHTLSTEMFAAPMGRCE  
AGVMHLFYIRAGVSRAMLLRLFLAMQKGGKHMDDLCPYL VHVVPVAFRLEPRNQRGVF SVDGELMVCEAVQ  
GQVHPNYLWMVSGSSDSPSGRDSQRRPPPEEPI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1994\\_b08.zip](https://cdn.origene.com/chromatograms/ja1994_b08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_133386

**ORF Size:** 1149 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_133386.3](#), [NP\\_596877.2](#)

**RefSeq Size:** 3134 bp

**RefSeq ORF:** 1152 bp

**Locus ID:** 170897

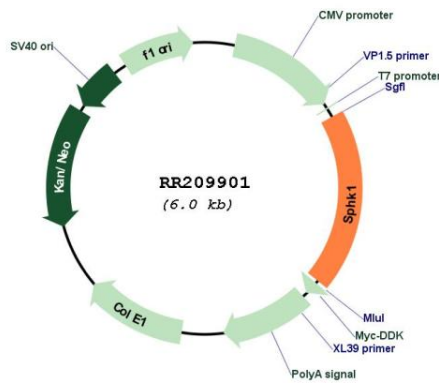
**UniProt ID:** [Q91V26](#)

**Cytogenetics:** 10q32.1-q32.2

**MW:** 42.9 kDa

**Gene Summary:** catalyzes the conversion of sphingosine to sphingosine 1 phosphate, which plays a role in cell proliferation and differentiation [RGD, Feb 2006]

**Product images:**



Circular map for RR209901