

## Product datasheet for **RR216714**

### Sphk1 (NM\_001270811) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sphk1 (NM\_001270811) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Sphk1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR216714 representing NM\_001270811  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGATCGCC

ATGCAACTGGACTCTCCACCAACCTCAAAGGATCTGGCCGCTCCGGAATGACGAGGGCGCTCTCACAG  
CCCAGGGAGGTGGAGAGGGCGAGCCCCACGGCCAGTACCAGACACCCGCTGGCAACACCGATAAGCA  
GCTGCACACTGGAGCCGCGTTACCTCTAGCAGCGCCGGGCAGCATCGGTGGCTCCTTGTACCGGGAG  
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TGCTGCTGAACCCCCGGGTGGCAAGGGCAAGGCTCTGAAGCTCTTTCAGAGCCGTGTGCGGCCCTTCT  
GGAGGAGGCTGAGGTATCCTTTAACTGATGCTCACCGAACGGCAGAACCATGCCAGGGAGCTGGTGTGT  
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TGGCAATGCGCTGGCAGCTTCTTTGAACTACTATGCTGGGCACGAGCAGGTCATAATGAAGATCTCCTG  
ATCAACTGCACACTGCTGTTATGCTGCCGCAGCTGTACCCATGAATCTGCTGTCCCTGCACACCGCTT  
CCGGACGGCAACTCTATTCTGTTCTCAGTCTGTCTGGGTTTCGTTGCTGACGTGGACTTGGAGAGTGA  
GAAATACAGGAGCTTGGGGGAGATTGTTTTACGGTGGGAACCTTTTTTCGCCTAGCAAGCTGCGCATT  
TACCAAGGCCAAGTGGCCTACCTTCTGTAGGGAAGGCTGCCTCTAAGATACCTGCTTCCCTCACTGGCAC  
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AGAGCAGGACTTCGTTCTGGTGTGGTGTGCTTACACCCACCTGAGCAGAGATGTTTGACGACCC  
ATGGGCCGCTGCGAGGCTGGTGTATGCATCTGTTCTATATACGTGCGGGGGTGTCAAGGGCCATGCTGC  
TGCGCCTCTTCTGGCCATGCAGAAGGGCAAGCATATGGACCTCGACTGCCCGTACTTGGTTCATGTGCC  
AGTGGTTGCCCTCCGCTGGAACCCAGGAACAGAGGGGAGTGTTCCTGTGGACGGGGAGCTGATGGTG  
TGTGAAGCTGTGACGGGCAAGTGACCCAACTACCTTTGGATGGTCTCTGGTAGCAGTGACTCCCCGT  
CCGGCCGGGACTCCAGCGGAGGCCACCTCCAGAAGAACAATA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR216714 representing NM\_001270811  
 Red=Cloning site Green=Tags(s)

MQLDSPPTSKDLAASGNDEGALTAQGGGEGEPHGQSPDTRLGNTDKQLHTGAAVTSSSAGAASVAPCQRE  
 PRDLAMQPADCPGRLPRPCRVLVLLNPRGGKALKLFQSRVRLLEEAEVSFKLMLTERQNHARELVC  
 AEELGHWDALAVMSGDGLMHEVVNGLMERPDWESAIQKPLCSLPGGSGNALAASLNYAGHEQVTNEDLL  
 INCTLLCCRQLSPMNLSSLHTASGRQLYSVLSLWGFVADVLESEKYRSLGEIRFTVGTFFRLASLRI  
 YQGQLAYLPVGKAASKIPASSLAQKGPANTYLVPLEEPPVPHWTVVPEQDFVLVLLHHTLSTEMFAAP  
 MGRCEAGVMHLFYIRAGVSRAMLLRFLAMQKKGHMDLDCPYLVHVPVVAFRLEPRNQGVFVSDGELMV  
 CEAVQGVHPNYLWMVSGSSDPSGRDSQRRPPPEEPI

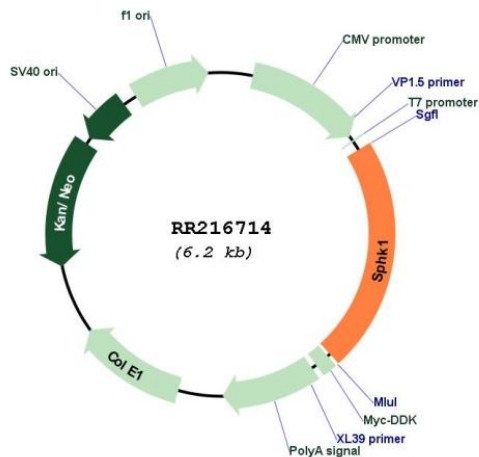
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



<b>ACCN:</b>	NM_001270811
<b>ORF Size:</b>	1374 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001270811.1</a> , <a href="#">NP_001257740.1</a>
<b>RefSeq Size:</b>	2915 bp
<b>RefSeq ORF:</b>	1377 bp
<b>Locus ID:</b>	170897
<b>UniProt ID:</b>	<a href="#">Q91V26</a>
<b>Cytogenetics:</b>	10q32.1-q32.2
<b>MW:</b>	49.9 kDa
<b>Gene Summary:</b>	catalyzes the conversion of sphingosine to sphingosine 1 phosphate, which plays a role in cell proliferation and differentiation [RGD, Feb 2006]