

Product datasheet for **RC203019**

SPHK2 (NM_020126) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPHK2 (NM_020126) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SPHK2
Synonyms:	SK-2; SK 2; SPK-2; SPK 2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC203019 representing NM_020126
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGAATGGACACCTTGAAGCAGAGGAGCAGCAGGACCAGAGGCCAGACCAGGAGCTGACCGGGAGCTGGG
 GCCACGGGCTTAGGAGCACCTTGGTCAGGGCTAAGGCCATGGCCCCGCCCCACCGCCACTGGCTGCCAG
 CACCCCGCTCCTCCATGGCGAGTTTGGCTCCTACCCAGCCCGAGGCCACGCTTTGCCCTCACCTTACA
 TCGCAGGCCCTGCACATACAGCGGCTGCCCCCAAACCTGAAGCCAGGCCCGGGGTGGCTGGTCCCGT
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 CTACACCTACCCTCGGGGCGGCGGGGCCCGGCGCAGAGCCACTCGCACCTTCCGGGCAGATGGGGCC
 GCCACCTACGAAGAGAACCGTGCCGAGGCCAGCGCTGGGCCACTGCCCTCACCTGTCTGCTCCGAGGAC
 TGCCACTGCCCGGGATGGGAGATCACCCCTGACCTGTACCTCGGCCGCCCGGTTGCTTCTATTGGT
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 GCCCGCCGACCACCTGCTGCCTCCGCTGGGCACCCGCTGCCCCAGACTGGGTGACGCTGGAGGGGA
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 CTTCCGCTAGAGCCGCTCACACCAGCGGCGTGTCTACAGTGGACGGGAGCAGGTGGAGTATGGGCCG
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 CC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203019 representing NM_020126
Red=Cloning site Green=Tags(s)

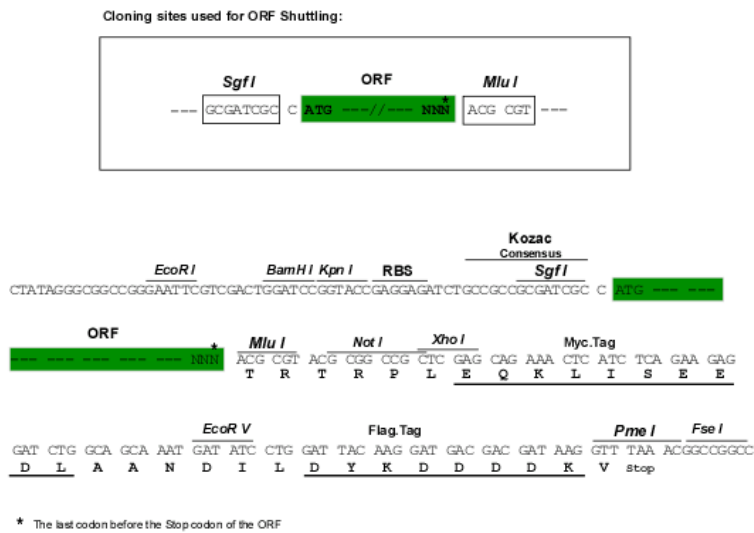
MNGHLEAEEQQDQRPDQELTGSWGHGPRSTLVRAKAMAPPPPLAASTPLLHGFEFGSYPARGPRFALTLT
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 ATYEENRAEAQRWATALTCLLRGLPLPGDGEITPDLLPRPPRLLLL VNPFGGRGLAWQWCKNHVLP
 MISE AGLSFNLIQTERQNHARELVQGLSLSEWDGIVTVSGDGLLHEVLNGLLDRPDWEEAVKMPV
 GILPCGSGN ALAGAVNQHGFEFAPALGLDLLLLNCSLLL CRGGGHPLDLLSVTLASGSRCSF
 LSVAWGFVSDVDIQSERF RALGSARFTLGTVLGLATLHTYRGRLSYLPATVEPASPTPAHSL
 PRAKSELTLTPDPAPPMHSPHRSV SDLPLPLQPALASPGSPEPLILSLNGGPELAGDWGGAGDAPL
 SPDPLLSSPPGSPKAALHSPVSEGA PVIPSSGLPLTPDARVGASTCGPPDHLLPPLGTPLPPD
 WVTLEGFVLM LAISP SHLGADLVAAPHAR FDDGLVHLCWVRSGISRAALLRLFLAMERGS
 HFSLGCPQLGYAAARA FRLEPLTPRGVLTVDGEQVEYGP LQAQMHPGIGTLLTGPPGCPGREP

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4542_c03.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_020126

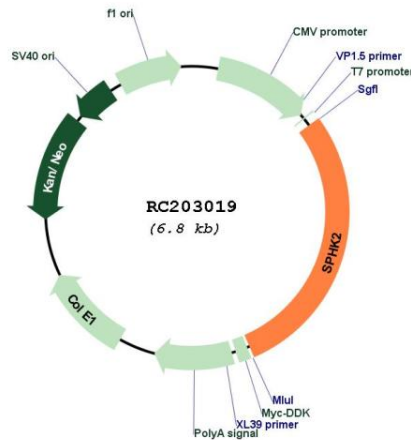
ORF Size: 1962 bp

OTI Disclaimer:	<p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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_020126.5
RefSeq Size:	3012 bp
RefSeq ORF:	1965 bp
Locus ID:	56848
UniProt ID:	Q9NRA0
Cytogenetics:	19q13.33
Domains:	DAGKc
Protein Families:	Druggable Genome
Protein Pathways:	Calcium signaling pathway, Fc gamma R-mediated phagocytosis, Metabolic pathways, Sphingolipid metabolism, VEGF signaling pathway
MW:	69 kDa

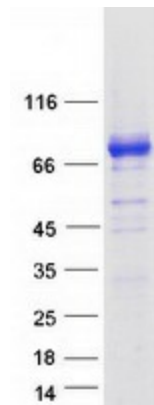
Gene Summary:

This gene encodes one of two sphingosine kinase isozymes that catalyze the phosphorylation of sphingosine into sphingosine 1-phosphate. Sphingosine 1-phosphate mediates many cellular processes including migration, proliferation and apoptosis, and also plays a role in several types of cancer by promoting angiogenesis and tumorigenesis. The encoded protein may play a role in breast cancer proliferation and chemoresistance. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Aug 2011]

Product images:



Circular map for RC203019



Coomassie blue staining of purified SPHK2 protein (Cat# [TP303019]). The protein was produced from HEK293T cells transfected with SPHK2 cDNA clone (Cat# RC203019) using MegaTran 2.0 (Cat# [TT210002]).