OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC234517

SPHK2 (NM_001204158) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPHK2 (NM_001204158) 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)

View online »

ORF Nucleotide Sequence:

>RC234517 representing NM_001204158
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAATGGACACCTTGAAGCAGAGGAGCAGCAGGACCAGGCCCTGCACATACAGCGGCTGCGCCCCAAAC
CTGAAGCCAGGCCCCGGGGTGGCCTGGTCCCGTTGGCCGAGGTCTCAGGCTGCTGCACCCTGCGAAGCCG
CAGCCCCTCAGACTCAGCGGCCTACTTCTGCATCTACACCTACCCTCGGGGCCGGCGCGGGGCCCGGCGC
AGAGCCACTCGCACCTTCCGGGCAGATGGGGCCGCCACCTACGAAGAGAACCGTGCCGAGGCCCAGCGCT
GGGCCACTGCCCTCACCTGTCTGCTCCGAGGACTGCCACTGCCCGGGGATGGGGAGATCACCCCTGACCT
GCTACCTCGGCCGCCCCGGTTGCTTCTATTGGTCAATCCCTTTGGGGGTCGGGGCCTGGCCTGGCAGTGG
TGTAAGAACCACGTGCTTCCCATGATCTCTGAAGCTGGGCTGTCCTTCAACCTCATCCAGACAGAACGAC
AGAACCACGCCCGGGAGCTGGTCCAGGGGCTGAGCCTGAGTGAGTGGGATGGCATCGTCACGGTCTCGGG
AGACGGGCTGCTCCATGAGGTGCTGAACGGGCTCCTAGATCGCCCTGACTGGGAGGAAGCTGTGAAGATG
CCTGTGGGCATCCTCCCCTGCGGCTCGGGCAACGCGCTGGCCGGAGCAGTGAACCAGCACGGGGGATTTG
AGCCAGCCCTGGGCCTCGACCTGTTGCTCAACTGCTCACTGTTGCTGTGCCGGGGTGGTGGCCACCCACT
GGACCTGCTCTCCGTGACGCTGGCCTCGGGCTCCCGCTGTTTCTCCTTCCTGTCTGTGGCCTGGGGCTTC
GTGTCAGATGTGGATATCCAGAGCGAGCGCTTCAGGGCCTTGGGCAGTGCCCGCTTCACACTGGGCACGG
TGCTGGGCCTCGCCACACTGCACACCTACCGCGGACGCCTCTCCTACCTCCCCGCCACTGTGGAACCTGC
CTCGCCCACCCCTGCCCATAGCCTGCCTCGTGCCAAGTCGGAGCTGACCCTAACCCCAGACCCAGCCCCG
CCCATGGCCCACTCACCCCTGCATCGTTCTGTGTCTGACCTGCCTCTTCCCCTGCCCCAGCCTGCCCTGG
CCTCTCCTGGCTCGCCAGAACCCCTGCCCATCCTGTCCCTCAACGGTGGGGGCCCAGAGCTGGCTGGGGA
CTGGGGTGGGGCTGGGGATGCTCCGCTGTCCCCGGACCCACTGCTGTCTTCACCTCCTGGCTCTCCCAAG
GCAGCTCTACACTCACCCGTCTCCGAAGGGGCCCCCGTAATTCCCCCATCCTCTGGGCTCCCACTTCCCA
CCCCTGATGCCCGGGTAGGGGCCTCCACCTGCGGCCCGCCCGACCACCTGCTGCCTCCGCTGGGCACCCC
GCTGCCCCCAGACTGGGTGACGCTGGAGGGGGACTTTGTGCTCATGTTGGCCATCTCGCCCAGCCACCTA
GGCGCTGACCTGGTGGCAGCTCCGCATGCGCGCTTCGACGACGGCCTGGTGCACCTGTGCTGGGTGCGTA
GCGGCATCTCGCGGGCTGCGCTGCTGCGCCTTTTCTTGGCCATGGAGCGTGGTAGCCACTTCAGCCTGGG
CTGTCCGCAGCTGGGCTACGCCGCGGCCCGTGCCTTCCGCCTAGAGCCGCTCACACCACGCGGCGTGCTC
ACAGTGGACGGGGAGCAGGTGGAGTATGGGCCGCTACAGGCACAGATGCACCCTGGCATCGGTACACTGC
TCACTGGGCCTCCTGGCTGCCCGGGGCGGGAGCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

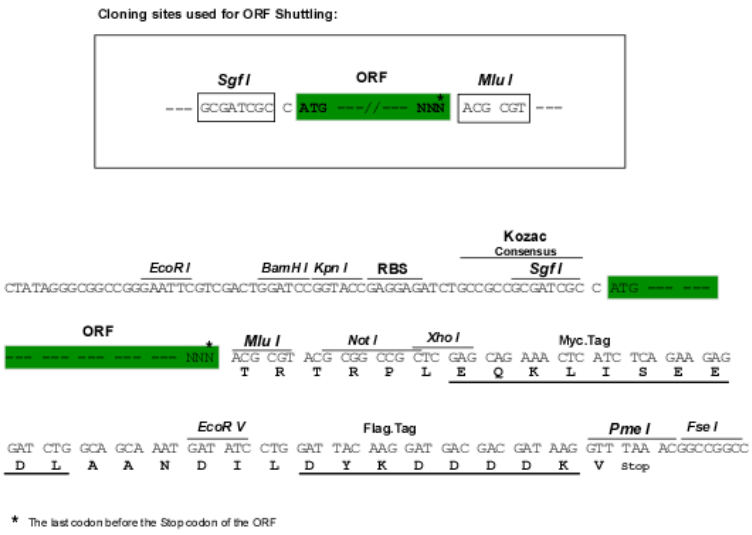
>RC234517 representing NM_001204158
Red=Cloning site Green=Tags(s)

MNGHLEAEEQQDQALHIQRLRPKPEARPRGGLVPLAEVSGCCTLRSRSPSDSAAYFCIYTYPRGRRGARR
RATRTFRADGAATYEENRAEAQRWATALTCLLRGLPLPGDGEITPDLLPRPPRLLLLVNPFGGRGLAWQW
CKNHVLPMISEAGLSFNLIQTERQNHARELVQGLSLSEWDGIVTVSGDGLLHEVLNGLLDRPDWEEAVKM
PVGILPCGSGNALAGAVNQHGGFEPALGLDLLLNCSLLLCRGGGHPLDLLSVTLASGSRCFSFLSVAWGF
VSDVDIQSERFRALGSARFTLGTVLGLATLHTYRGRLSYLPATVEPASPTPAHSLPRAKSELTLTPDPAP
PMAHSPLHRSVSDLPLPLPQPALASPGSPEPLPILSLNGGGPELAGDWGGAGDAPLSPDPLLSSPPGSPK
AALHSPVSEGAPVIPPSSGLPLPTPDARVGASTCGPPDHLLPPLGTPLPPDWVTLEGDFVLMLAISPSHL
GADLVAAPHARFDDGLVHLCWVRSGISRAALLRLFLAMERGSHFSLGCPQLGYAAARAFRLEPLTPRGVL
TVDGEQVEYGPLQAQMHPGIGTLLTGPPGCPGREP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001204158

ORF Size: 1785 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: NM_001204158.3

RefSeq Size: 2787 bp

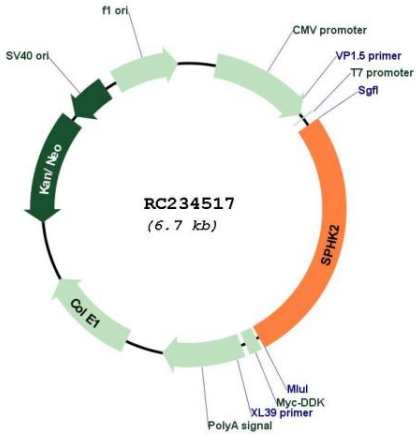
RefSeq ORF: 1788 bp

Locus ID: 56848

UniProt ID: Q9NRA0

Cytogenetics:	19q13.33
Protein Families:	Druggable Genome
Protein Pathways:	Calcium signaling pathway, Fc gamma R-mediated phagocytosis, Metabolic pathways, Sphingolipid metabolism, VEGF signaling pathway
MW:	63.4 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 RC234517