

## Product datasheet for **SC320762**

### SPHK2 (NM\_020126) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SPHK2 (NM_020126) Human Untagged Clone
Tag:	Tag Free
Symbol:	SPHK2
Synonyms:	SK-2; SK 2; SPK-2; SPK 2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_020126.3  
CGACTGACTAGCCGGCGATAACGGCAGAGAGCATAGAGCGCAGGAACAAGCGCAACGTC  
CAAGAGGGAAGGCCAGCAGCTCGGGGCCTCTCTGGCCCTACCCAGGCCGTGTTCTCGA  
TAGCTTTCCGGAAGAAAGGGATCTGGGAGCGAGATGCGTGTAGCTAGCACGATGCGTCGC  
GCGGTGACGCTCTGGCCGACGCGACGCGCTCTCAGTGGCTCCCGGAGGACCCGGCGGG  
CCCAGTGTGGAGAGCTGAAGGTCAGGCCAGGACAGTGAACAGAGCAGAGGAC  
CAGCCTACTATGGCTTAAGACCCAGGGCCAGGGTCCCCTGATGTAACAGAGCAGAGGAC  
CAGCAGATGAATGGACACCTTGAAGCAGAGGAGCAGCAGGACCAGAGGCCAGACCAGGAG  
CTGACCGGGAGCTGGGGCCACGGGCTAGGAGCACCTGGTCAGGGCTAAGGCCATGGCC  
CCGCCCCACCGCACTGGCTGCCAGCACCCGCTCCTCCATGGCGAGTTTGGCTCCTAC  
CCAGCCCAGGGCCACGCTTTGCCCTCACCTTACATCGCAGGCCCTGCACATACAGCGG  
CTGCGCCCCAAACCTGAAGCCAGGCCCGGGTGGCTGGTCCCCTGGCCGAGGTCTCA  
GGCTGCTGCAACCTGCGAAGCCGACGCCCTCAGACTCAGCGGCCACTTCTGCATCTAC  
ACCTACCTCGGGGCCGGCGCGGGGCCCGGCGCAGAGCCACTCGCACCTCCGGGAGAT  
GGGGCCGCCACCTACGAAGAGAACCGTGCCGAGGCCAGCGCTGGGCCACTGCCCTCACC  
TGTCTGCTCCGAGGACTGCCACTGCCCGGGGATGGGGAGATCACCCCTGACCTGTACCT  
CGGCCGCCCGGTTGCTTCTATTGGTCAATCCCTTTGGGGTGGGGCCTGGCCTGGCAG  
TGGTGTAAGAACCACGTGCTTCCCATGATCTCTGAAGCTGGGCTGCTCCTCAACCTCATC  
CAGACAGAACGACAGAACCACGCCGGGAGCTGGTCCAGGGGCTGAGCCTGAGTGAGTGG  
GATGGCATCGTACGGTCTCGGGAGACGGGCTGCTCCATGAGGTGCTGAACGGGCTCCTA  
GATCGCCCTGACTGGGAGGAAGCTGTGAAGATGCCTGTGGGCATCCTCCCTGCGGCTCG  
GGCAACCGCTGGCCGAGCAGTGAACCAGCACGGGGATTTGAGCCAGCCCTGGGCTC  
GACCTGTTGCTCAACTGCTCACTGTTGCTGTGCCGGGTTGGTGGCCACCCACTGGACCTG  
CTCTCCGTGACGCTGGCCTCGGGCTCCCCTGTTTCTCCTTCTGTGTGGCCTGGGGC  
TTCGTGTCAGATGTGGATATCCAGAGCGAGCGCTTCAGGGCCTGGGCAGTGCCCGCTTC  
ACACTGGGCACGGTGTGGCCTCGCCACTGCACACCTACCGCGGACGCTCTCCTAC  
CTCCCCGCACTGTGGAACCTGCCTCGCCACCCCTGCCCATAGCCTGCCTCGTGCCAAG



[View online »](#)

```

TCGGAGCTGACCCTAACCCAGACCCAGCCCCGCCATGGCCCACTCACCCCTGCATCGT
TCTGTGTCTGACCTGCCTCTTCCCTGCCCCAGCCTGCCCTGGCCTCTCCTGGCTCGCA
GAACCCCTGCCCATCCTGTCCCTCAACGGTGGGGGCCAGAGCTGGCTGGGGACTGGGGT
GGGGCTGGGGATGCTCCGCTGTCCCGGACCCACTGTGTCTTACCTCCTGGCTCTCC
AAGGCAGCTCTACACTCACCCGTCTCCGAAGGGGCCCGTAATCCCCATCCTCTGG
CTCCCACCTTCCCACCCCTGATGCCCGGGTAGGGCCTCCACCTGCGGGCCCGCCGACC
CTGTGCCTCCGCTGGGCACCCCGTCCCCAGACTGGGTGACGCTGGAGGGGGACTTT
GTGCTCATGTTGGCCATCTCGCCAGCCACCTAGGCGCTGACCTGGTGGCAGCTCCGCAT
GCGCGCTTCGACGACGGCCTGGTGCACCTGTGCTGGGTGCGTAGCGCATCTCGCGGCT
GCGCTGTGCGCCTTTTCTTGGCCATGGAGCGTGGTAGCCAATTACAGCTGGGCTGCCG
CAGCTGGGCTACGCCGCGGCCGTGCCTTCCGCTAGAGCCGCTCACACCACGCGCGTG
CTCACAGTGGACGGGAGCAGGTGGAGTATGGCCGCTACAGGCACAGATGCACCCTGGC
ATCGGTACTGCTCACTGGGCCTCTGGCTGCCCGGGCGGGAGCCCTGAAACTAAACA
AGCTTGGTACCCCGGGGGCGGGCCTACATTCCAATGGGGCGGAGCCTGAGCTAGGGG
GTGTGGCCTGGCTGCTAGAGTTGGTGGCAGGGGCCCTGGCCCGTCTCAGGATTGCGC
TCGCTTTCATGGACAGACGTGATGCTGGAAGTGGGCGTCTGACGGTTAAAGAGAAA
TGGGCTCGTCCCAGGGTAGTGCCTGATCAATGAGGGCGGGCCTGGCGTCTGATCTGGG
GCCGCCCTTACGGGGCAGGGCTCAGTCCTGACGCTTGCCACCTGCTCCTACCCGGCCAGG
ATGGGTGAGGGCGGAGTCTATTTTACGCGTCGCCCAATGACAGGACCTGGAATGTACTGG
CTGGGGTAGGCCCTCAGTGAAGTCCGCGGTCAGGGCCCGCAGCCTCGCCCCATCCACTCCG
GTGCCTCCATTTAGCTGGCCAATCAGCCAGGAGGGGCAGGTTCCCGGGGCGGGCGCTA
GGATTTGCACTAATGTTCTCTCCCGCGGGTGGGGCGGGGAAATTCATATCCCCTGTT
CGTCTCATGCGCGTCTCCGTCGCCAATCTAAAAGCAATTGAAAAGGTCTATGCAATAA
AGGCAGTCGCTTCATTCTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAA

```

- Restriction Sites:** Please inquire
- ACCN:** NM\_020126
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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\\_020126.3](#), [NP\\_064511.2](#)
- RefSeq Size:** 3012 bp

RefSeq ORF:	1965 bp
Locus ID:	56848
UniProt ID:	<a href="#">Q9NRA0</a>
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
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a). Variants 1 and 3 both encode the same isoform (a).</p>