

Product datasheet for **MC219281**

Shc1 (NM_001113331) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Shc1 (NM_001113331) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Shc1
Synonyms:	p66; p66shc; Shc; ShcA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC219281 representing NM_001113331
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGATCTTCTACCCCCAAGCCGAAGTACAACCCACTTCGGAATGAGTCTCTGTATCGCTGGAGGAGG
GGGCTTCGGGGTCTACCCCTCCGGAGGAGCTACCTTCCCATCAGCTTCATCCCTGGGACCCATTCTGCC
TCCTCTGCCGGGGACGATAGTCCGACTACCCTGTGTTCTTCTTTCCCGGATGAGCAACCTGAAGCTG
GCCAATCTGCTGGGGGCGCCTGGGGCCTAAAGGGGAGCCAGGAAAGGCTGCTGAAGATGGGGAAGGGA
GTGCAGGGGACAGCCCTTCGGGACTCAGGCCTCTTGCCCTCCTCCAGGACATGAACAAGCTGAGTGGAGG
CGGCGGGCGCAGGACTCGGGTGAAGGGGGCCAGCTGGGGGGCAGGAGTGGACCAGACCGGGAGCTTT
GTCAATAAGCCCACACGAGGCTGGCTGCATCCCAACGACAAAGTCATGGGACCTGGGGTTTCTACTTGG
TTCGGTACATGGGCTGTGTGGAGGTCTTACAGTCAATGCGAGCCCTTGACTTCAATACCCGGACTCAGGT
CACCAGGGAGGCCATCAGTTTGGTGTGTGAAGCTGTGCCTGGTGCCTGCAAGGGGCGACAAGGAGGAGAAAG
CCTTGTAGCCGCCACTCAGCTCCATCCTGGGGAGGAGTAACCTGAAGTTTGGTGGAAATGCCAATCACTC
TCACTGTGTCTACCAGCAGCCTTAACCTCATGGCAGCCGACTGCAACAGATCATTGCCAACCATCATAT
GCAATCTATCTTTTCGGTCCGGTGGGGATCCGGACACAGCTGAGTATGTTGCCTATGTTGCCAAAGAC
CCTGTGAATCAGAGAGCCTGCCATATCCTGGAGTGTCTGAAGGGCTTGCTCAGGATGTCATCAGCACCA
TCGGGCAGGCCTTTGAGTTGCGCTTCAAACAGTATCTCAGGAATCCACCGAAGCTGGTCAACCCCATGA
CAGGATGGCTGGCTTTGAGTGGCTCAGCTTGGGATGAGGAGGAAGAAGAGCCCTGACCATCAGTACTAC
AATGACTTTCAGGGAAGGAACCCCTCTTGGTGGGTGGTAGATATGAGGCTTCGGGAAGGGGCTGCTC
GACCCACTCTGCCTAGTGCCAGATGTCCAGCCACTTGGGAGCTACACTGCCTATAGGGCAGCATGCTGC
AGGAGACCATGAAGTCCGTAAACAGATGTTGCCTCCGCCCTTGCCAGGCAGAGAACTCTTCGATGAC
CCCTCCTATGTCAACATCCAGAATCTAGACAAGGCCCGCAGGCTGGGGTGGGGCTGGGCCCCAATC
CTTCTCTAATGGCAGTGCACCCGAGACCTTTTTGACATGAAGCCCTTGAAGATGCACTTCGGGTGCC
ACCCACCCGAGTCCATGTCCATGGCTGAGCAGCTGCAAGGGGAGCCCTGGTCCACGGGAAGCTGAGC
CGGAGGGAGGCCGAGGCGCTGCTGCAGCTCAATGGTACTTCTTGGTGGAGAGACGACGACCGCCTG
GCCAGTATGTGCTCACTGGCCTGCAGAGTGGGAGCCCAAGCACTTGTGCTGGTGGACCCTGAAGGTGT
GGTTCGGACAAAGGATCACCGCTTGGAGTGTGAGTCACTGATCAGCTACCACATGGACAATCACTTG
CCCATCATCTCTGCGGGCAGCGAAGTGTGCTACAGCAACCCGTGGATCGGAAAGT**GTA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001113331
Insert Size: 1740 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 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](#)

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_001113331.2](#), [NP_001106802.1](#)

RefSeq Size: 3569 bp

RefSeq ORF: 1740 bp

Locus ID: 20416

UniProt ID: [P98083](#)

Cytogenetics: 3 39.11 cM

Gene Summary:

Signaling adapter that couples activated growth factor receptors to signaling pathways. Participates in signaling downstream of the angiopoietin receptor TEK/TIE2, and plays a role in the regulation of endothelial cell migration and sprouting angiogenesis (By similarity). Participates in a signaling cascade initiated by activated KIT and KITLG/SCF. Isoform p47Shc and isoform p52Shc, once phosphorylated, couple activated receptor kinases to Ras via the recruitment of the GRB2/SOS complex and are implicated in the cytoplasmic propagation of mitogenic signals. Isoform p47Shc and isoform p52 may thus function as initiators of the Ras signaling cascade in various non-neuronal systems. Isoform p66Shc does not mediate Ras activation, but is involved in signal transduction pathways that regulate the cellular response to oxidative stress and life span. Isoform p66Shc acts as a downstream target of the tumor suppressor p53 and is indispensable for the ability of stress-activated p53 to induce elevation of intracellular oxidants, cytochrome c release and apoptosis. The expression of isoform p66Shc has been correlated with life span.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (a).