

Product datasheet for **MG225873**

Shc1 (NM_001113331) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Shc1 (NM_001113331) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Shc1
Synonyms:	p66; p66shc; Shc; ShcA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG225873 representing NM_001113331
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGATCTTCTACCCCCAAGCCGAAGTACAACCCACTTCGGAATGAGTCTCTGTATCGCTGGAGGAGG
 GGGCTTCGGGTCTACCCCTCCGGAGGAGCTACCTTCCCATCAGCTTATCCCTGGGACCCATTCTGCC
 TCCTCTGCCGGGGACGATAGTCCGACTACCCTGTGTTCTTCTTCCCCGGATGAGCAACCTGAAGCTG
 GCCAATCTGCTGGGGGCGCCTGGGCCTAAAGGGGAGCCAGGAAAGGCTGCTGAAGATGGGGAAGGGA
 GTGCAGGGGCGAGCCCTTCGGGACTCAGGCCTCTTGCCCTCCTCCAGGACATGAACAAGCTGAGTGGAGG
 CGGCGGGCGCAGGACTCGGGTGAAGGGGGCCAGCTGGGGGGCAGGAGTGGACCAGACACGGGAGCTTT
 GTCAATAAGCCCACACGAGGCTGGCTGCATCCCAACGACAAAGTCATGGGACCTGGGGTTTCTACTTGG
 TTCGGTACATGGGCTGTGTGGAGGTCTTACAGTCAATGCGAGCCCTTGACTTCAATACCCGGACTCAGT
 CACCAGGGAGGCCATCAGTTTGGTGTGAAGCTGTGCCTGGTGCCTGCAAGGGGCGACAAGGAGGAGAAA
 CCTTGTAGCCGCCACTCAGCTCCATCCTGGGGAGGAGTAACCTGAAGTTTGGTGGAAATGCCAATCACTC
 TCACTGTGTCTACCAGCAGCCTTAACCTCATGGCAGCCGACTGCAACAGATCATTGCCAACCATACAT
 GCAATCTATCTTTTCGGTCCGGTGGGGATCCGGACACAGCTGAGTATGTTGCCTATGTTGCCAAAGAC
 CCTGTGAATCAGAGAGCCTGCCATATCCTGGAGTGTCTGAAGGGCTTGCTCAGGATGTCATCAGCACCA
 TCGGGCAGGCCTTTGAGTTGCGCTTCAAACAGTATCTCAGGAATCCACCGAAGCTGGTACCCCCCATGA
 CAGGATGGCTGGCTTTGATGGCTCAGCTTGGGATGAGGAGGAAGAAGAGCCCCCTGACCATCAGTACTAC
 AATGACTTTCAGGGAAGGAACCCCTCTTGGTGGGTGGTAGATATGAGGCTTCGGGAAGGGGCTGCTC
 GACCCACTTGCCTAGTGCCAGATGTCAGCCACTTGGGAGCTACACTGCCTATAGGGCAGCATGCTGC
 AGGAGACCATGAAGTCCGTAAACAGATGTTGCCTCCGCCCTTGCCAGGCAGAGAACTCTTCGATGAC
 CCTCCTATGTCAACATCCAGAATCTAGACAAGGCCCGCAGGCTGGGGGTGGGGCTGGGCCCCAAATC
 CTTCTCTAATGGCAGTGCACCCGAGACCTTTTTGACATGAAGCCCTTTGAAGATGCACCTCGGGTGC
 ACCCCCACCGCAGTCCATGTCCATGGCTGAGCAGCTGCAAGGGGAGCCCTGGTCCACGGGAAGCTGAGC
 CGGAGGGAGGCCGAGGCGCTGCTGCAGCTCAATGGTGACTTCTTGGTGCAGAGAGCAGCACGCGCTG
 GCCAGTATGTGCTCACTGGCCTGCAGAGTGGGAGCCCAAGCACTTGCTGCTGGTGGACCCTGAAGGTGT
 GGTTCCGACAAAGGATCACCGCTTGAGAGTGTACCTGATCAGCTACCACATGGACAATCACTTG
 CCCATCATCTCTCGGGCAGCGAACTGTGCTACAGCAACCCGTGGATCGGAAAGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225873 representing NM_001113331
 Red=Cloning site Green=Tags(s)

MDLLPPKPKYNPLRNESLSSLEEGASGSTPPEELPSPSASSLGPILPPLPGDSDPTTLCSSFFPRMSNLKL
 ANPAGGRLGPKGEPGKAAEDGEGSAGAALRDSGLLPLLQDMNKLSGGGRRRTRVEGGQLGGEWTRHGSF
 VNKPTRGWLHPNDKVMGPGVSYLVRYMGCVEVLQSMRALDFNTRTQVTREAI SLVCEAVPGAKGATRRRK
 PCSRPLSSILGRSNLKFAGMPITLTVSTSSNLMAADCKQIIANHHMQSISFASGGPDPDAEYVAVYAKD
 PVNQRACHILECPEGLAQDVISTIGQAFELRFKQYLRNPPKLVTPHDMAGFDGSAWDEEEEEPPDHQYY
 NDFPGKEPPLGGVDMRLREGAARPTLPSAQMSSHLGATLPIGQHAAGDHEVRKQMLPPPPCPGREL FDD
 PSYVNIQNLDKARQAGGGAGPPNPSLNGSAPRDLFDMKPFEDALRVPPPQSMSMAEQLQGEPWFHGKLS
 RREAEALLQLNGDFLVRESTTTPGQYVLTGLQSGQPKHLLLVDPEGVVRTKDRHFESVSHLISYHMDNHL
 PIISAGSELCLQPVDKRV

TRTRPLE - GFP Tag - V

Chromatograms:

https://cdn.origene.com/chromatograms/ja2528_d10.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001113331

ORF Size: 1737 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

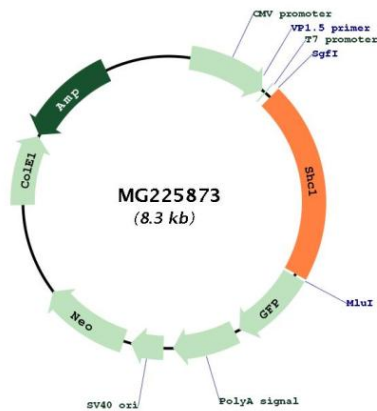
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_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]

Product images:


Circular map for MG225873