

Product datasheet for **MG207498**

Shc1 (BC036172) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Shc1 (BC036172) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Shc1
Synonyms:	Shc, p66, ShcA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207498 representing BC036172
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAACAAGCTGAGTGGAGGCGGGCGCAGGACTCGGGTAGAAGGGGGCCAGCTGGGGGCGAGGAGT
 GGACCAGACACGGGAGCTTTGTCAATAAGCCACACGAGGCTGGCTGCATCCCAACGACAAAGTCATGGG
 ACCTGGGGTTTCTACTTGGTTCGGTACATGGGCTGTGTGGAGGTCTTACAGTCAATGCGAGCCCTTGC
 TTCAATACCCGGACTCAGGTCACCAGGGAGGCCATCAGTTTGGTGTGTGAAGCTGTGCCTGGTGCCAAAG
 GGGCGACAAGGAGGAGAAAGCCTTGTAGCCGCCACTCAGCTCCATCCTGGGAGGAGTAACCTGAAGTT
 TGCTGGAATGCCAATCACTCTCACTGTGTCTACCAGCAGCCTTAACTCATGGCAGCCGACTGCAAAACAG
 ATCATTGCCAACCATCACATGCAATCTATCTTTTCGCGTCCGGTGGGGATCCGGACACAGCTGAGTATG
 TTGCTATGTTGCCAAAGACCCTGTGAATCAGAGAGCCTGCCATATCCTGGAGTGTCTGAAGGGCTTGC
 TCAGGATGTCATCAGCACCATCGGGCAGGCCTTTGAGTTGCGCTTCAAACAGTATCTCAGGAATCCACCG
 AAGCTGGTCACCCCCATGACAGGATGGCTGGCTTTGATGGCTCAGCTTGGGATGAGGAGGAAGAAGAGC
 CCCCTGACCATCAGTACTACAATGACTTTCCAGGGAAGGAACCCCTCTTGGTGGGGTGGTAGATATGAG
 GCTTCGGGAAGGGGCTGCTCGACCCACTCTGCCTAGTGCCAGATGTCCAGCCACTTGGGAGCTACACTG
 CCTATAGGGCAGCATGCTGCAGGAGACCATGAAGTCCGTAACAGATGTTGCCTCCGCCCTTGCCACAG
 GCAGAGAACTCTTCGATGACCCCTCCTATGTCAACATCCAGAATCTAGACAAGGCCCGGCAGGCTGGGGG
 TGGGGCTGGGCCCCAAATCCTTCTCTTAATGGCAGTGCACCCGAGACCTTTTTGACATGAAGCCCTTT
 GAAGATGCACTTCGGGTGCCACCCACCGCAGTCCATGTCCATGGCTGAGCAGCTGCAAGGGGAGCCCT
 GGTTCCACGGGAAGCTGAGCCGGAGGGAGGCGGCTGCTGCAGCTCAATGGTGACTTCTTGGTGGC
 AGAGAGCACGACCACGCCTGGCCAGTATGTGCTCACTGGCTGCAGAGTGGGCAGCCCAAGCACTTGCTG
 CTGGTGGACCCTGAAGGTGTGGTTCGGACAAGGATCACCGCTTTGAGAGTGTGAGTACCTGATCAGCT
 ACCACATGGACAATCACTTGCCCATCATCTCTGCGGGCAGCGAACTGTGCTACAGCAACCCGTGGATCG
 GAAAGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG207498 representing BC036172
 Red=Cloning site Green=Tags(s)

MNKL SGGGRRTRVEGGQLGGEWTRHGSFVNKPTRGWLHPNDKVMGPGVSYLVRYMGCVEVLQSMRALD
 FNTRTQVTREAI SLVCEAVPGAKGATRRRKPCSRPLSSILGRSNLKFAGMPITLTVSTSSLNLMAADCKQ
 IIANHHMQSISFASGGDPDAEYVAYVAKDPVNQRACHILECPEGLAQDVI STIGQAFELRFKQYLRNPP
 KLVTPHDRMAGFDGSAWDEEEEEPPDHQYNDFFPGKEPPLGGVDMRLREGAARPTLPSAQMSHLLGATL
 PIGQHAAGDHEVRKQMLPPPPCGREL FDDPSYVNIQNLDKARQAGGGAGPPNPSLNGSAPRDLFDMKPF
 EDALRVPPPPQSMSMAEQLQGEFPHGKLSRREA EALLQLNGDFLVRESTTTPGQYVLTGLQSGQPKHLL
 LVDEPEGVVRTKDRHFESVSHLISYHMDNHLPIISAGSELCLQQPVDKRV

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

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: [BC036172](#), [AAH36172](#)

RefSeq Size: 3144 bp

RefSeq ORF: 1409 bp

Locus ID: 20416

Cytogenetics: 3 39.11 cM

Gene Summary: Signaling adapter that couples activated growth factor receptors to signaling pathways. Participates in signaling downstream of the angiotensin 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]