

Product datasheet for **MR207498**

Shc1 (NM_011368) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Shc1 (NM_011368) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Shc1
Synonyms:	p66; p66shc; Shc; ShcA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR207498 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAACAAGCTGAGTGGAGGCGGGCGCAGGACTCGGGTAGAAGGGGGCCAGCTGGGGGCGAGGAGT
 GGACCAGACACGGGAGCTTTGTCAATAAGCCACACGAGGCTGGCTGCATCCCAACGACAAAGTCATGGG
 ACCTGGGGTTTCTACTTGGTTCGGTACATGGGCTGTGTGGAGGTCTTACAGTCAATGCGAGCCCTTGAC
 TTCAATACCCGGACTCAGGTCACCAGGGAGGCCATCAGTTTGGTGTGTAAGCTGTGCCTGGTGCCAAAG
 GGGCGACAAGGAGGAGAAAGCCTGTAGCCGCCACTCAGCTCCATCCTGGGAGGAGTAACCTGAAGTT
 TGCTGGAATGCCAATCACTCTCACTGTGTCTACCAGCAGCCTTAACCTCATGGCAGCCGACTGCAAAACAG
 ATCATTGCCAACCATCACATGCAATCTATCTTTTCGCGTCCGGTGGGGATCCGGACACAGCTGAGTATG
 TTGCCTATGTTGCCAAAGACCCTGTGAATCAGAGAGCCTGCCATATCCTGGAGTGTCTGAAGGGCTTGC
 TCAGGATGTCATCAGCACCATCGGGCAGGCCTTTGAGTTGCGCTTCAAACAGTATCTCAGGAATCCACCG
 AAGCTGGTCACCCCCATGACAGGATGGCTGGCTTTGATGGCTCAGCTTGGGATGAGGAGGAAGAAGAGC
 CCCCTGACCATCAGTACTACAATGACTTTCCAGGGAAGGAACCCCTCTTGGTGGGGTGGTAGATATGAG
 GCTTCGGGAAGGGGCTGCTCGACCCACTCTGCCTAGTGCCAGATGTCCAGCCACTTGGGAGCTACACTG
 CCTATAGGGCAGCATGCTGCAGGAGACCATGAAGTCCGTAACAGATGTTGCCTCCGCCGCTTGCCACAG
 GCAGAGAACTCTTCGATGACCCCTCCTATGTCAACATCCAGAATCTAGACAAGGCCCGGCAGGCTGGGG
 TGGGGCTGGGCCCCAAATCCTTCTCTTAATGGCAGTGACCCCGAGACCTTTTTGACATGAAGCCCTTT
 GAAGATGCACTTCGGGTGCCACCCACCGCAGTCCATGTCCATGGCTGAGCAGCTGCAAGGGGAGCCCT
 GTTTCCACGGGAAGCTGAGCCGGAGGGAGGCCGAGGCGCTGCTGCAGCTCAATGGTGACTTCTTGGTGCG
 AGAGAGCACGACCACGCCTGGCCAGTATGTGCTCACTGGCTGCAGAGTGGGCAGCCCAAGCACTTGCTG
 CTGGTGGACCCTGAAGGTGTGGTTCGGACAAAGGATCACCGCTTTGAGAGTGTGAGTACCTGATCAGCT
 ACCACATGGACAATCACTTGCCCATCATCTCTGCGGGCAGCGAACTGTGCTACAGCAACCCGTGGATCG
 GAAAGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207498 protein sequence
 Red=Cloning site Green=Tags(s)

MNKLSGGGRRTRVEGGQLGGEWTRHGSFVNKPTRGWLHPNDKVMGPGVSYLVRYMGCVEVLQSMRALD
 FNTRTQVTREAIISLVCEAVPGAKGATRRRKPCSRPLSSILGRSNLKFAGMPIITLTVSTSSLNLMAADCKQ
 IIANHHMQSISFASGGDPDTAEYVAYVAKDPVNQRACHILECPEGLAQDVIISTIGQAFELRFKQYLRNPP
 KLVTPHDMAGFDGSAWDEEEEEPPDHQYNDFFGKEPPLGGVDMRLREGAARPTLPSAQMSHLGATL
 PIGQHAAGDHEVRKQMLPPPPCPGRELFDPSYVNIQNLDKARQAGGGAGPPNPSLNGSAPRDLFDMKPF
 EDALRVPPPPQSMSMAEQLQGEPWFHGKLSRREAEALLQLNGDFLVRESTTTPGQYVLTGLQSQPKHLL
 LVDEPEGVVRTKDRHFESVSHLISYHMDNHLPIISAGSELCLQQPVDRKV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_011368

ORF Size: 1410 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_011368.5](#), [NP_035498.2](#)

RefSeq Size: 3171 bp

RefSeq ORF: 1410 bp

Locus ID: 20416

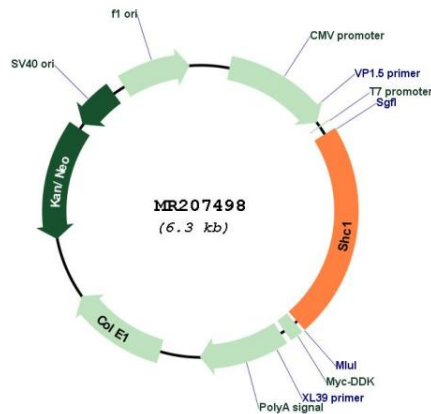
UniProt ID: [P98083](#)

Cytogenetics: 3 39.11 cM

MW: 51.4 kDa

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 MR207498