

## Product datasheet for TR516598

## **Shc1 Mouse shRNA Plasmid (Locus ID 20416)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Shc1 Mouse shRNA Plasmid (Locus ID 20416)

Locus ID:

p66; p66shc; Shc; ShcA Synonyms:

pRS (TR20003) Vector:

E. coli Selection: Ampicillin Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Shc1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

20416). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

BC036172, NM 001113331, NM 011368, NM 011368.1, NM 011368.2, NM 011368.3, RefSeq:

NM 011368.4, NM 011368.5, NM 001113331.1, NM 001113331.2

**UniProt ID:** P98083

**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]



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shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).