

## Product datasheet for MR207498L4V

## OriGene Technologies, Inc.

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## Shc1 (NM\_011368) Mouse Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** Shc1 (NM\_011368) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Shc<sup>2</sup>

**Synonyms:** p66; p66shc; Shc; ShcA

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_011368 **ORF Size:** 1410 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR207498).

Sequence:
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.

**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







## **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]