

Product datasheet for RC204362L4V

OriGene Technologies, Inc.

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SHC (SHC1) (NM_003029) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: SHC (SHC1) (NM 003029) Human Tagged ORF Clone Lentiviral Particle

Symbol: SHC

Synonyms: SHC; SHCA

Mammalian Cell Puromycin

Selection:

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

Tag: mGFP

ACCN: NM_003029 **ORF Size:** 1422 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC204362).

Sequence:

UniProt ID:

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. <u>More info</u>

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeg: NM 003029.3

RefSeq Size:3195 bpRefSeq ORF:1425 bpLocus ID:6464

Cytogenetics: 1q21.3

Domains: SH2, PID

Protein Families: Druggable Genome

P29353





Protein Pathways:

Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Chemokine signaling pathway, Chronic myeloid leukemia, Dilated cardiomyopathy, ErbB signaling pathway, Focal adhesion, Glioma, Hypertrophic cardiomyopathy (HCM), Insulin signaling pathway, Leukocyte transendothelial migration, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Pathogenic Escherichia coli infection, Regulation of actin cytoskeleton, Tight junction, Vibrio cholerae infection, Viral myocarditis

MW:

51.7 kDa

Gene Summary:

This gene encodes three main isoforms that differ in activities and subcellular location. While all three are adapter proteins in signal transduction pathways, the longest (p66Shc) may be involved in regulating life span and the effects of reactive oxygen species. The other two isoforms, p52Shc and p46Shc, link activated receptor tyrosine kinases to the Ras pathway by recruitment of the GRB2/SOS complex. p66Shc is not involved in Ras activation. Unlike the other two isoforms, p46Shc is targeted to the mitochondrial matrix. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2011]