

## **Product datasheet for CF501074**

### OriGene Technologies, Inc.

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# SHC (SHC1) Mouse Monoclonal Antibody [Clone ID: OTI1D3]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1D3

Applications: FC, IF, WB

Recommended Dilution: WB 1:2000, IF 1:100, Flow 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human SHC1 (NP\_003020) produced in HEK293T

cell

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 51.5 kDa

**Gene Name:** SHC adaptor protein 1

Database Link: NP 003020

Entrez Gene 20416 MouseEntrez Gene 85385 RatEntrez Gene 6464 Human

P29353





Background:

Signaling adapter that couples activated growth factor receptors to signaling pathway. Isoform p46Shc and isoform p52Shc, once phosphorylated, couple activated receptor tyrosine kinases to Ras via the recruitment of the GRB2/SOS complex and are implicated in the cytoplasmic propagation of mitogenic signals. Isoform p46Shc and isoform p52Shc 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

**Synonyms:** SHC; SHCA

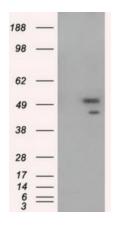
Protein Families: Druggable Genome

**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

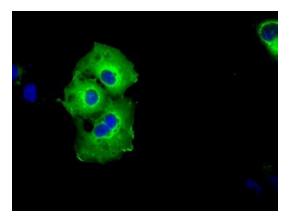
cytoskeleton, Tight junction, Vibrio cholerae infection, Viral myocarditis

# **Product images:**

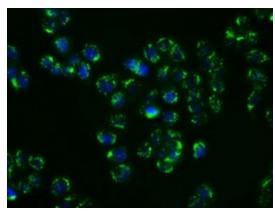


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY SHC1 ([RC204362], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SHC1. Positive lysates [LY401060] (100ug) and [LC401060] (20ug) can be purchased separately from OriGene.

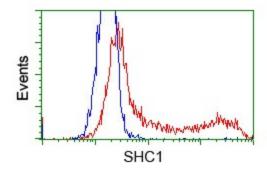




Anti-SHC1 mouse monoclonal antibody ([TA501074]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY SHC1 ([RC204362]).



Immunofluorescent staining of HT29 cells using anti-SHC1 mouse monoclonal antibody ([TA501074]).



HEK293T cells transfected with either pCMV6-ENTRY SHC1 ([RC204362]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-SHC1 mouse monoclonal ([TA501074]), and then analyzed by flow cytometry.