

#### DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human SHC1 in direct ELISAs and human, mouse, and rat SHC1 in Western blots. In direct ELISAs, no cross-reactivity with recombinant human SHC3 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 725001
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human SHC1 Pro379-Val470, Trp488-Val579 Accession # P29353
<b>Conjugate</b>	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

SH2 domain-containing transforming protein C1 (SHC1), also known as ShcA, is a cytoplasmic adaptor protein that is important in the signal transduction from growth factor, cytokine, and lymphocyte antigen receptors. SHC1 contains a PTB/PID domain (aa 156-339), a collagen homology domain (aa 340-487), and an SH2 domain (aa 488-579). Alternate splicing generates additional isoforms that differ in the extent of N-terminal truncation. Activation of SHC1 by phosphorylation at Ser239, Ser240, and Tyr317 enables Shc1 to interact with the GRB2/SOS complex, leading to the transcription of genes involved in mitogenesis and apoptosis. The p46 and p52 isoforms promote mitogenic signaling, while the p66 isoform promotes apoptosis and functions as a negative regulator of SHC1-mediated mitogenic signal transduction. Within aa 488-579, human SHC1 shares 100% aa sequence identity with mouse and rat SHC1.

#### PRODUCT SPECIFIC NOTICES

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