

**SHC Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7762a****Specification**

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**SHC Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P29353](#)**SHC Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 6464**Other Names**

SHC-transforming protein 1, SHC-transforming protein 3, SHC-transforming protein A, Src homology 2 domain-containing-transforming protein C1, SH2 domain protein C1, SHC1, SHC, SHCA

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**SHC Antibody (N-term) Blocking Peptide - Protein Information****Name** SHC1**Synonyms** SHC, SHCA**Function**

Signaling adapter that couples activated growth factor receptors to signaling pathways. Participates in a signaling cascade initiated by activated KIT and KITLG/SCF. 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 (By similarity). Participates in signaling downstream of the angiotensin receptor TEK/TIE2, and plays a role in the regulation of endothelial cell migration and sprouting angiogenesis.

**Cellular Location**

Cytoplasm. Cell junction, focal adhesion [Isoform p66Shc]: Mitochondrion. Note=In case of oxidative conditions, phosphorylation at 'Ser-36' of isoform p66Shc, leads to mitochondrial accumulation.

**Tissue Location**

Widely expressed. Expressed in neural stem cells but absent in mature neurons

**SHC Antibody (N-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**SHC Antibody (N-term) Blocking Peptide - Images****SHC Antibody (N-term) Blocking Peptide - Background**

The SHC gene encodes for a signaling and transforming protein containing Src homology 2 and 3 (SH2 and SH3) domains. The SHC gene encodes 2 widely expressed overlapping proteins of 46 and 52 kD, both containing a C-terminal SH2 domain. Adjacent to the SH2 region is a glycine and proline rich region. These 2 proteins differ in their N terminals. SHC proteins are involved in mitogenic signal transduction and act by coupling growth factor receptors to the RAS signaling pathway. The protein encoded by the SHC1 gene is thought to act as an adaptor in many signal transduction pathways.

**SHC Antibody (N-term) Blocking Peptide - References**

Pelicci G., Cell 70:93-104(1992).Craparo A., J. Biol. Chem. 270:15639-15643(1995).