

## ARG40924 anti-SHC1 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes SHC1
Tested Reactivity	Hu, Rat
Predict Reactivity	Ms, Hm
Tested Application	IHC-Fr, IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SHC1
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 424-440 of Human SHC1. (DPSYVNVQNLDKARQAV)
Conjugation	Un-conjugated
Alternate Names	SH2 domain protein C1; SHC-transforming protein 3; SHC-transforming protein 1; SHC; Src homology 2 domain-containing-transforming protein C1; SHC-transforming protein A; SHCA

### Application Instructions

Application table	Application	Dilution
	IHC-Fr	1:200 - 1:1000
	IHC-P	1:200 - 1:1000

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

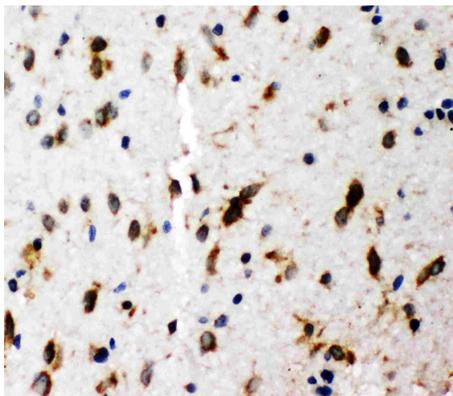
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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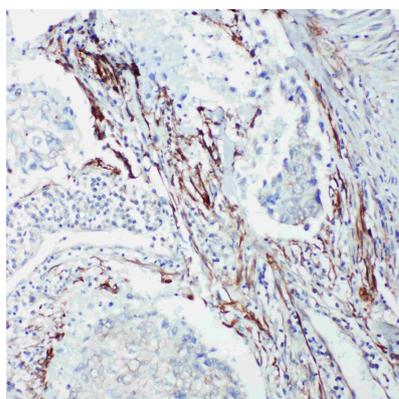
Gene Symbol	SHC1
Gene Full Name	SHC (Src homology 2 domain containing) transforming protein 1
Background	This gene encodes three main isoforms that differ in activities and subcellular location. While all three are adapter proteins in signal transduction pathways, the longest (p66Shc) may be involved 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]
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. [UniProt]
Calculated Mw	63 kDa
PTM	Phosphorylated by activated epidermal growth factor receptor. Phosphorylated in response to FLT4 and KIT signaling. Isoform p46Shc and isoform p52Shc are phosphorylated on tyrosine residues of the Pro-rich domain. Isoform p66Shc is phosphorylated on Ser-36 by PRKCB upon treatment with insulin, hydrogen peroxide or irradiation with ultraviolet light (By similarity). Tyrosine phosphorylated in response to FLT3 signaling (By similarity). Tyrosine phosphorylated by activated PTK2B/PYK2 (By similarity). Tyrosine phosphorylated by ligand-activated ALK. Tyrosine phosphorylated by ligand-activated PDGFRB. Tyrosine phosphorylated by TEK/TIE2. May be tyrosine phosphorylated by activated PTK2/FAK1; tyrosine phosphorylation was seen in an astrocytoma biopsy, where PTK2/FAK1 kinase activity is high, but not in normal brain tissue. Isoform p52Shc dephosphorylation by PTPN2 may regulate interaction with GRB2. [UniProt]
Cellular Localization	Cytoplasm. Isoform p46Shc: Mitochondrion matrix. Note=Localized to the mitochondria matrix. Targeting of isoform p46Shc to mitochondria is mediated by its first 32 amino acids, which behave as a bona fide mitochondrial targeting sequence. Isoform p52Shc and isoform p66Shc, that contain the same sequence but more internally located, display a different subcellular localization. Isoform p66Shc: Mitochondrion. [UniProt]



ARG40924 anti-SHC1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat brain tissue stained with ARG40924 anti-SHC1 antibody.

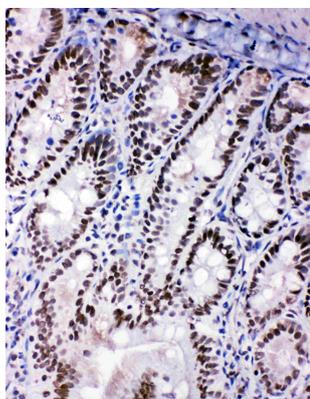
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ARG40924 anti-SHC1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue stained with ARG40924 anti-SHC1 antibody.

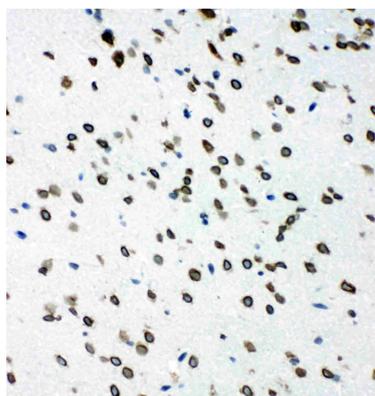
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ARG40924 anti-SHC1 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat intestine tissue stained with ARG40924 anti-SHC1 antibody.

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ARG40924 anti-SHC1 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat brain tissue stained with ARG40924 anti-SHC1 antibody.

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