

## Shc (phospho Tyr349) Polyclonal Antibody

Catalog No: YP0578

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Shc

**Fields:** >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine resistance;>>ErbB

signaling pathway;>>Ras signaling pathway;>>Chemokine signaling

pathway;>>Phospholipase D signaling pathway;>>Focal adhesion;>>Natural killer cell mediated cytotoxicity;>>Neurotrophin signaling pathway;>>Insulin signaling pathway;>>Estrogen signaling pathway;>>Prolactin signaling

pathway;>>Relaxin signaling pathway;>>Growth hormone synthesis, secretion and action;>>Alcoholism;>>Bacterial invasion of epithelial cells;>>MicroRNAs in cancer;>>Glioma;>>Chronic myeloid leukemia;>>Breast cancer;>>Hepatocellular

carcinoma;>>Gastric cancer

Gene Name: SHC1

**Protein Name:** SHC-transforming protein 1

P29353

P98083

Human Gene Id: 6464

**Human Swiss Prot** 

No:

Mouse Gene Id: 20416

**Mouse Swiss Prot** 

No:

Rat Gene Id: 85385

Rat Swiss Prot No: Q5M824

Immunogen: The antiserum was produced against synthesized peptide derived from human

Shc around the phosphorylation site of Tyr349. AA range:315-364

**Specificity:** Phospho-Shc (Y349) Polyclonal Antibody detects endogenous levels of Shc

protein only when phosphorylated at Y349.



**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band:** 66(p66 isoform), 52(p52 isoform), 46(p46 isoform)kD

Cell Pathway: ErbB\_HER;Chemokine;Focal adhesion;Natural killer cell mediated

cytotoxicity; Neurotrophin; Insulin\_Receptor; Glioma; Chronic myeloid leukemia;

**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:** domain:In response to a variety of growth factors, isoform p46Shc and isoform

p52Shc bind to phosphorylated Trk receptors through their phosphotyrosine binding (PID) and/or SH2 domains. The PID and SH2 domains bind to specific phosphorylated tyrosine residues in the Asn-Pro-Xaa-Tyr(P) motif of the Trk receptors. Isoform p46Shc and isoform p52Shc are in turn phosphorylated on three tyrosine residues within the extended proline-rich domain. These

phosphotyrosines act as docking site for GRB2 and thereby are involved in Ras activation., function: 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

Subcellular Cytoplasm.; [Isoform p46Shc]: Mitochondrion matrix . Localized to the

Location:

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 . In case of oxidative conditions, phosphorylation at

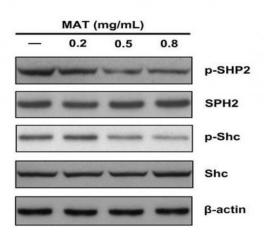
2/4



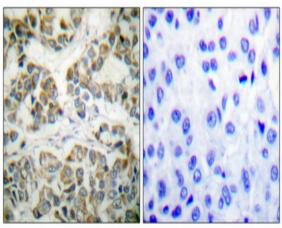
'Ser-36' of isoform p66Shc, leads to mitochondrial accumulation. .

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

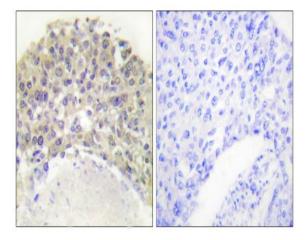
## **Products Images**



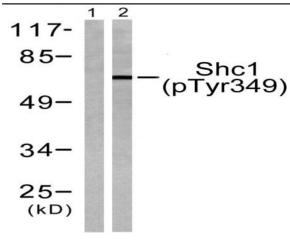
Ma, Lingdi, et al. "Matrine inhibits BCR/ABL mediated ERK/MAPK pathway in human leukemia cells." Oncotarget8.65 (2017): 108880.



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). Highpressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was preabsorbed by immunogen peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Shc (Phospho-Tyr349) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with EGF 200ng/ml 30', using Shc (Phospho-Tyr349) Antibody. The lane on the left is blocked with the phospho peptide.