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Anti-SHC Picoband Antibody
Catalog # ABO12082

Specification

Anti-SHC Picoband Antibody - Product Information

Application	**WB, IHC-P, IHC-F**
Primary Accession	P29353
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for SHC-transforming protein 1(SHC1) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SHC Picoband Antibody - 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

Calculated MW
62822 MW KDa

Application Details
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Human, -
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Cytoplasm.

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

Protein Name
SHC-transforming protein 1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human SHC (536-564aa VDPEGVVRTKDHRFESVSHLISYHMDNHL), identical to the related mouse and rat sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Contains 1 PID domain.

Anti-SHC Picoband Antibody - 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 angiopoietin 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

Anti-SHC Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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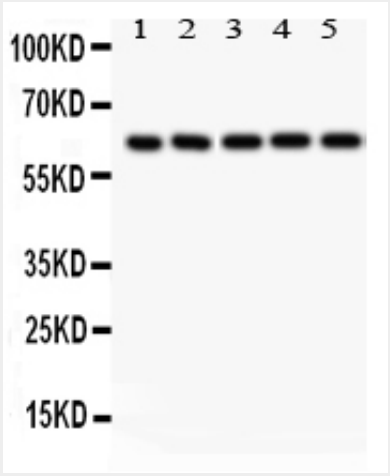
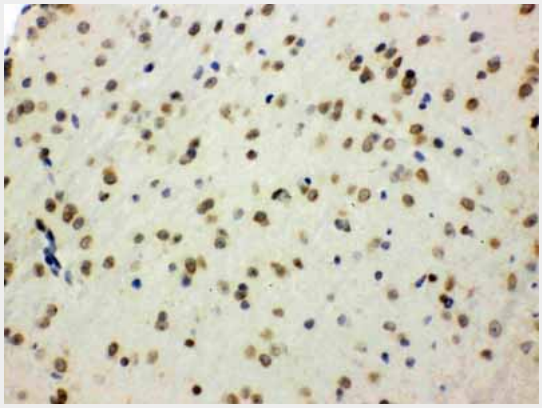
- Flow Cytomety
- Cell Culture

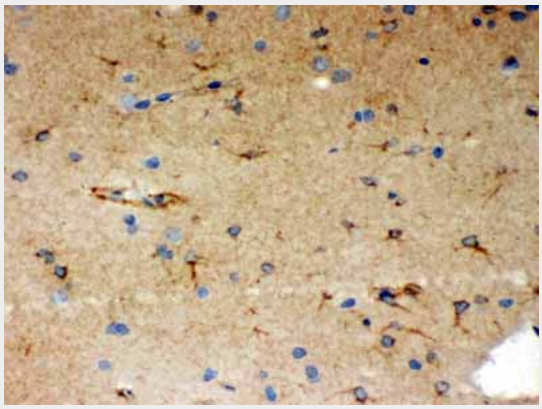
Anti-SHC Picoband Antibody - Images



Anti- SHC1 Picoband antibody, ABO12082, Western blottingAll lanes: Anti SHC1 (ABO12082) at 0.5ug/mlLane 1: Rat Thymus Tissue Lysate at 50ugLane 2: Mouse Testis Tissue Lysate at 50ugLane 3: JURKAT Whole Cell Lysate at 40ugLane 4: K562 Whole Cell Lysate at 40ugLane 5: HELA Whole Cell Lysate at 40ugPredicted bind size: 63KDObserved bind size: 63KD



Anti- SHC1 Picoband antibody, ABO12082, IHC(P)IHC(P): Mouse Brain Tissue



Anti- SHC1 Picoband antibody, ABO12082, IHC(P)IHC(P): Rat Brain Tissue

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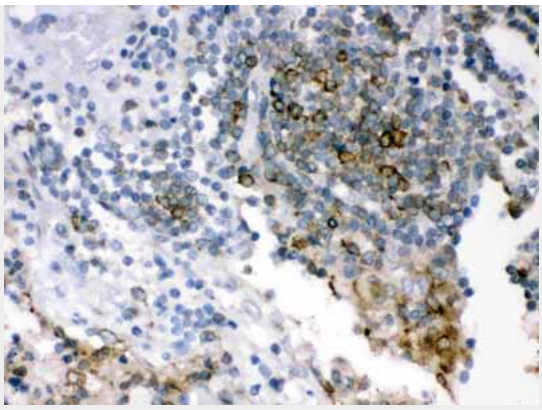
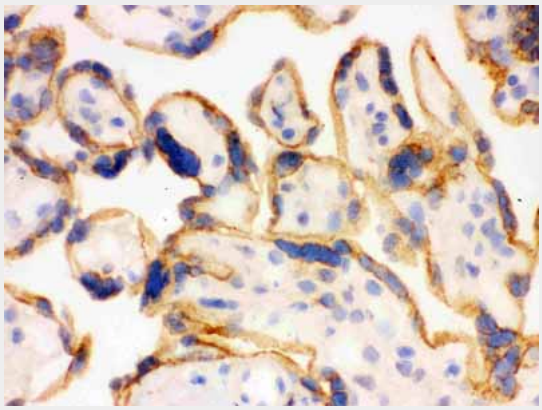


Anti- SHC1 Picoband antibody, ABO12082, IHC(P)IHC(P): Human Lung Cancer Tissue



Anti- SHC1 Picoband antibody, ABO12082, IHC(F)IHC(F): Human Placenta Tissue

Anti-SHC Picoband Antibody - Background

SHC, also known as SHC1 (SHC-transforming protein 1) or SHCA, is a protein that in humans is encoded by the SHC1 gene. SCOP classifies the 3D structure as belonging to the SH2 domain family. 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.