

Anti-SHC Picoband Antibody

Catalog # ABO12082

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.

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
Application Details	Immunohistochemistry(Frozen Section), 0.5-1 μ g/ml, Human, - Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Mouse, Rat
Subcellular Localization	Cytoplasm.
Tissue Specificity	Widely expressed. Expressed in neural stem cells but absent in mature neurons.
Source	Eukaryota
Protein Name	SHC-transforming protein 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.

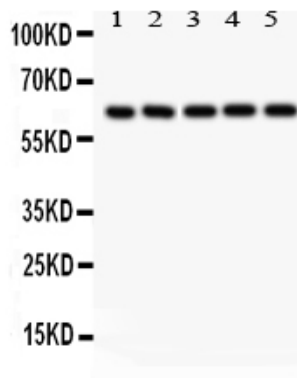
Protein Information

Name	SHC1 (HGNC:10840)
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. Involved in the oncostatin-M-mediated signaling pathway through type II OSM receptor complex (heterodimers composed of OSMR and IL6ST) where it contributes to activation of the Ras/Raf/MAPK pathway through JAK1-dependent recruitment to OSMR subunit of OSMR complex and SHC1 association with GRB2 (PubMed:11016927).
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

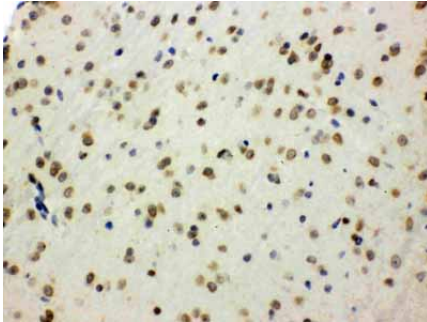
Background

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.

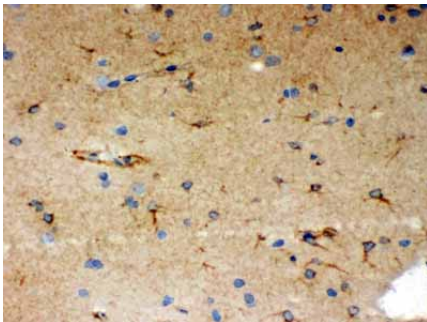
Images



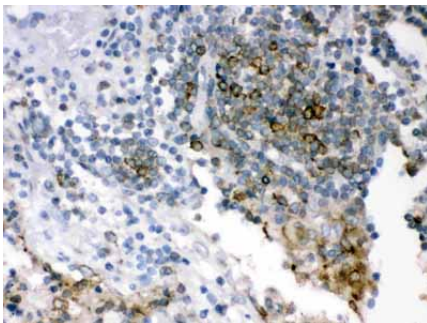
Anti- SHC1 Picoband antibody, ABO12082, Western blotting
 All lanes: Anti SHC1 (ABO12082) at 0.5ug/ml
 Lane 1: Rat Thymus Tissue Lysate at 50ug
 Lane 2: Mouse Testis Tissue Lysate at 50ug
 Lane 3: JURKAT Whole Cell Lysate at 40ug
 Lane 4: K562 Whole Cell Lysate at 40ug
 Lane 5: HELA Whole Cell Lysate at 40ug
 Predicted bind size: 63KD
 Observed bind size: 63KD



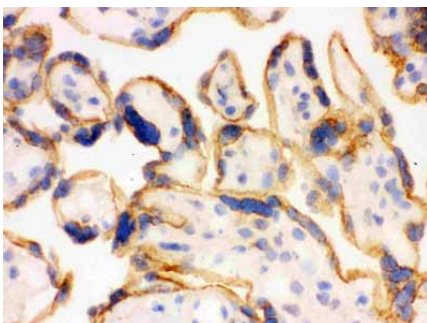
Anti- SHC1 Picoband antibody, ABO12082, IHC(P)
 IHC(P): Mouse Brain Tissue



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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.