

Anti-SHC/SHC1 Antibody Picoband™

Catalog Number: PB9391

About SHC1

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.

Overview

Product Name	Anti-SHC/SHC1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SHC/SHC1 Antibody Picoband™ catalog # PB9391. Tested in IHC, IHC-F, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, IHC-F, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P29353

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SHC, identical to the related mouse and rat sequences.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and IHC(F).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Human, - Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

Anti-SHC/SHC1 Antibody Picoband™ (PB9391) Images

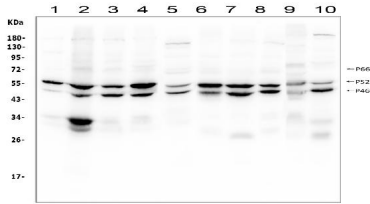


Figure 1. Western blot analysis of SHC using anti-SHC antibody (PB9391).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human A431 whole cell lysate,
Lane 2: human Hela whole cell lysate,
Lane 3: human HepG2 whole cell lysate,
Lane 4: human Jurkat whole cell lysate,
Lane 5: human K562 whole cell lysate,
Lane 6: human THP-1 whole cell lysate,
Lane 7: rat C6 whole cell lysate,
Lane 8: mouse thymus tissue lysate,
Lane 9: mouse RAW246.7 whole cell lysate,
Lane 10: mouse NIH3T3 whole cell lysate.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SHC antigen affinity purified polyclonal antibody (Catalog # PB9391) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. Specific bands were detected for SHC at approximately 46, 52, 66KD. The expected band size for SHC are at 46, 52, 66KD.

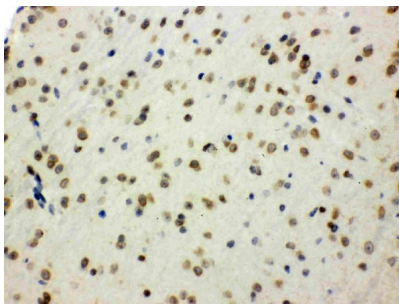
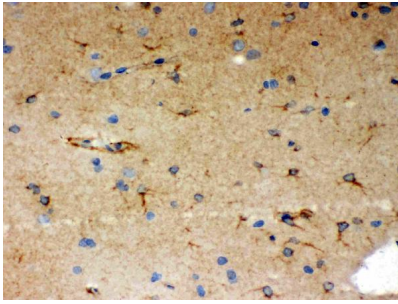


Figure 2. IHC analysis of SHC1 using anti-SHC1 antibody (PB9391).

SHC1 was detected in paraffin-embedded section of Mouse Brain Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SHC1 Antibody (PB9391) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Figure 3. IHC analysis of SHC1 using anti-SHC1 antibody (PB9391).

SHC1 was detected in paraffin-embedded section of Rat Brain Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SHC1 Antibody (PB9391) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and



incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

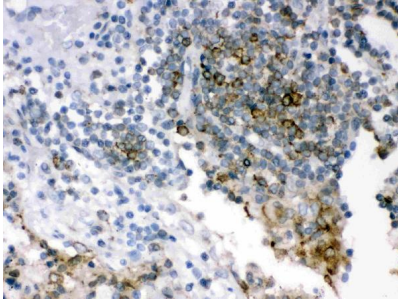


Figure 4. IHC analysis of SHC1 using anti-SHC1 antibody (PB9391).

SHC1 was detected in paraffin-embedded section of Human Lung Cancer Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SHC1 Antibody (PB9391) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

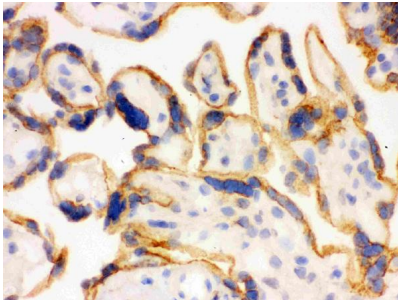


Figure 5. IHC analysis of SHC1 using anti-SHC1 antibody (PB9391).

SHC1 was detected in frozen section of Human Placenta Tissue. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SHC1 Antibody (PB9391) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

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