10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Shc (Phospho-Tyr427) Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52354

Specification

Shc (Phospho-Tyr427) Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P29353
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**62822**

Shc (Phospho-Tyr427) 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

Dilution
WB~~1:1000
IHC~~1:50~100

Format
Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions
-20℃

Shc (Phospho-Tyr427) 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.

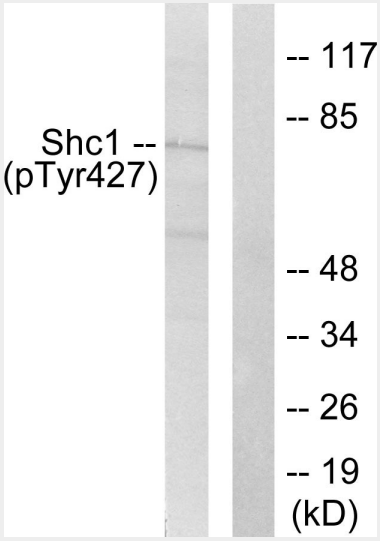
Tissue Location
Widely expressed. Expressed in neural stem cells but absent in mature neurons

Shc (Phospho-Tyr427) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Shc (Phospho-Tyr427) Antibody - Images



Western blot analysis of extracts from Hela cells treated with Calyculin A (50ng/ml, 15mins), using Shc (phospho-Tyr427) antibody.

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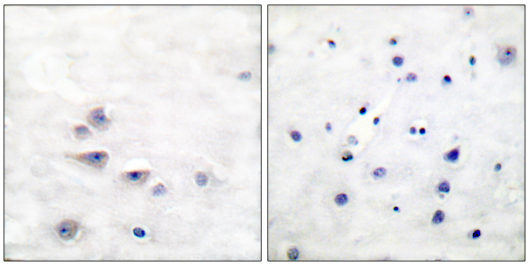

Immunohistochemical analysis of paraffin-embedded human brain tissue using Shc (phospho-Tyr427) antibody

Shc (Phospho-Tyr427) Antibody - Background

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Shc (Phospho-Tyr427) Antibody - References

Pelicci G.,et al.Cell 70:93-104(1992).
Migliaccio E.,et al.EMBO J. 16:706-716(1997).
Harun R.B.,et al.Genomics 42:349-352(1997).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Goshima N.,et al.Nat. Methods 5:1011-1017(2008).