

p66 / SHC Antibody (clone 3F4)

Mouse Monoclonal Antibody Catalog # ALS13394

Specification

p66 / SHC Antibody (clone 3F4) - Product Information

Application WB, IF, IHC
Primary Accession P29353
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 63kDa KDa

p66 / SHC Antibody (clone 3F4) - 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

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

p66 / SHC Antibody (clone 3F4) is for research use only and not for use in diagnostic or therapeutic procedures.

p66 / SHC Antibody (clone 3F4) - 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

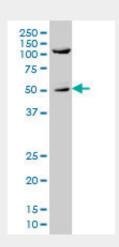
Widely expressed. Expressed in neural stem cells but absent in mature neurons

p66 / SHC Antibody (clone 3F4) - Protocols

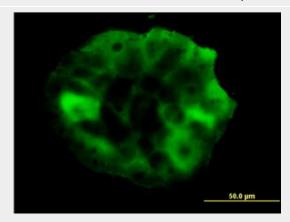
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

p66 / SHC Antibody (clone 3F4) - Images

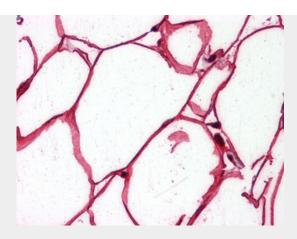


SHC1 monoclonal antibody clone 3F4 Western blot of SHC1 expression in A-431.

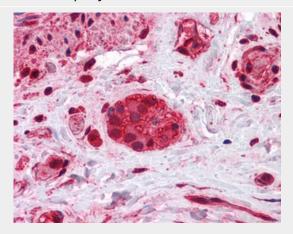


Immunofluorescence of monoclonal antibody to SHC1 on A-431 cells (antibody concentration 10 ug/ml).

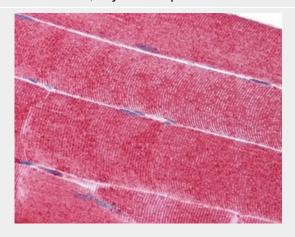




Anti-SHC1 antibody IHC of human adipocytes.



Anti-SHC1 antibody IHC of human colon, myenteric plexus.



Anti-SHC1 antibody IHC of human skeletal muscle.

p66 / SHC Antibody (clone 3F4) - Background

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





Tel: 858.875.1900 Fax: 858.875.1999

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.

p66 / SHC Antibody (clone 3F4) - 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).