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Mouse Shc1 Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19642c

Product Information

Application	WB, E
Primary Accession	P98083
Other Accession	NP_001106802.1
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40722
Calculated MW	62608
Antigen Region	378-405

Additional Information

Gene ID	20416
Other Names	SHC-transforming protein 1, SHC-transforming protein A, Src homology 2 domain-containing-transforming protein C1, SH2 domain protein C1, Shc1, Shc, ShcA
Target/Specificity	This Mouse Shc1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 378-405 amino acids from the Central region of mouse Shc1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Shc1 Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Shc1
Synonyms	Shc, ShcA

Function	Signaling adapter that couples activated growth factor receptors to signaling pathways. Participates in signaling downstream of the angiopoietin receptor TEK/TIE2, and plays a role in the regulation of endothelial cell migration and sprouting angiogenesis (By similarity). Participates in a signaling cascade initiated by activated KIT and KITLG/SCF. Isoform p47Shc and isoform p52Shc, once phosphorylated, couple activated receptor kinases to Ras via the recruitment of the GRB2/SOS complex and are implicated in the cytoplasmic propagation of mitogenic signals. Isoform p47Shc and isoform p52 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.
Cellular Location	Cytoplasm. Cell junction, focal adhesion {ECO:0000250|UniProtKB:P29353} [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

Signaling adapter that couples activated growth factor receptors to signaling pathway. Isoform p47Shc and isoform p52Shc, once phosphorylated, couple activated receptor kinases to Ras via the recruitment of the GRB2/SOS complex and are implicated in the cytoplasmic propagation of mitogenic signals. Isoform p47Shc and isoform p52 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.

References

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Ma, Z., et al. Oncogene 29(41):5559-5567(2010)
Fadini, G.P., et al. Diabetes 59(9):2306-2314(2010)
Ranieri, S.C., et al. Proc. Natl. Acad. Sci. U.S.A. 107(30):13420-13425(2010)
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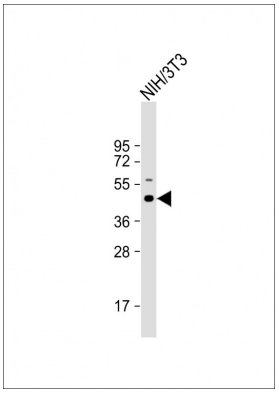
Images

Anti-Mouse Shc1 Antibody (Center) at 1:1000 dilution + NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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