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# Shc-SH2 (366-473): sc-4110 WB

## BACKGROUND

Src homology (SH2) domains are noncatalytic sequences that are conserved among a number of cytoplasmic signaling proteins. These signaling proteins are directly regulated by receptor tyrosine kinases and control the activation of mitogenic signal transduction pathways by such receptors. For instance, ligand-induced activation of the EGF and PDGF receptors induces dimerization, triggers receptor autophosphorylation on tyrosine residues and results in the binding of a number of cytoplasmic SH2 domain proteins such as PLC  $\gamma$ 1, Ras GAP and PI 3-kinase to the activated receptors. Another gene, Shc, encodes 46 and 52 kDa proteins with a single SH2 domain but no identifiable catalytic domain, suggesting that Shc is a member of the expanding class of proteins that function to couple activated growth factor receptors to signaling pathways that regulate proliferation of mammalian cells.

## REFERENCES

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## SOURCE

Shc-SH2 (366-473) is expressed in *E. coli* as a 39 kDa tagged fusion protein corresponding to amino acids 366-473 of the SH2 domain of Shc of human origin.

## APPLICATIONS

Shc-SH2 (366-473) is suitable as a Western blotting control for sc-288, sc-967 and sc-1695.

## PRODUCT

Shc-SH2 (366-473) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10  $\mu$ g in 0.1 ml SDS-PAGE loading buffer.

## STORAGE

Store at -20° C; stable for one year from the date of shipment.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.