SANTA CRUZ BIOTECHNOLOGY, INC.

Sck (E-3): sc-514627

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Src homology 2 (SH2) domains bind specifically to tyrosine-phosphorylated proteins that temporally participate in signal transduction events. Shc-like protein (Sck) is a neuronal adaptor protein that contains an N-terminal PTB (phosphotyrosine binding) domain, a collagen homology (CH) domain, and a conserved C-terminal SH2 domain. Human Sck transcripts are present at high levels in liver, pancreas, prostate and ovary. In vascular endothelial cells, Sck participates in VEGF-induced signal transduction. Treatment of human umbilical vein endothelial (HUVEC) cells with VEGF induces recruitment of Sck to tyrosine-1175 of the kinase insert domain-containing receptor (KDR) and enhances Sck tyrosine phosphorylation.

REFERENCES

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6. Kojima, T., Yoshikawa, Y., Takada, S., Sato, M., Nakamura, T., Takahashi, N., Copeland, N.G., Gilbert, D.J., Jenkins, N.A. and Mori, N. 2001. Genomic organization of the Shc-related phosphotyrosine adapters and characterization of the full-length Sck/ShcB: specific association of p68-Sck/ShcB with pp135. Biochem. Biophys. Res. Commun. 284: 1039-1047.
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CHROMOSOMAL LOCATION

Genetic locus: SHC2 (human) mapping to 19p13.3.

SOURCE

Sck (E-3) is a mouse monoclonal antibody raised against amino acids 321-390 mapping within an internal region of Sck of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Sck (E-3) is recommended for detection of Sck of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Sck siRNA (h): sc-40928, Sck shRNA Plasmid (h): sc-40928-SH and Sck shRNA (h) Lentiviral Particles: sc-40928-V.

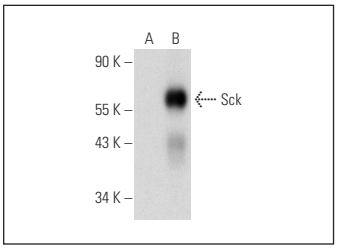
Molecular Weight of Sck: 68 kDa.

Positive Controls: Sck (h): 293T Lysate: sc-372116 or IMR-32 cell lysate: sc-2409.

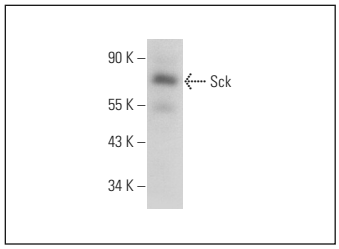
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Sck (E-3): sc-514627. Western blot analysis of Sck expression in non-transfected: sc-117752 (**A**) and human Sck transfected: sc-372116 (**B**) 293T whole cell lysates.



Sck (E-3): sc-514627. Western blot analysis of Sck expression in IMR-32 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.