

p-c-Src (H-3): sc-166860



The Power to Question

BACKGROUND

The major translational products of the Src gene family are membrane-associated tyrosine protein kinases that lack transmembrane and external amino acid sequences. By virtue of their common structural motifs, the Src family is composed of nine members in vertebrates, including c-Src, c-Yes, Fgr, Yrk, Fyn, Lyn, Hck, Lck and Blk. Src family kinases, which contain an amino-terminal cell membrane anchor followed by SH3 and SH2 domains, transduce signals that are involved in the control of a variety of cellular processes, including proliferation, differentiation, motility and adhesion. Src family members are normally maintained in an inactive state and can be activated transiently during cellular events such as mitosis. Different subcellular locations of Src family kinases may be important for the regulation of specific cellular processes, such as mitogenesis, cytoskeletal organization and membrane trafficking. C-Src (also designated pp60Src, Src p60 and proto-oncogene tyrosine protein kinase Src) is expressed in a broad range of tissue and cell types, although the highest levels of c-Src are detected in neuronal tissues and platelets. C-Src may play a role in events associated with both neuronal differentiation and maintenance of mature neuronal cell functions.

CHROMOSOMAL LOCATION

Genetic locus: SRC (human) mapping to 20q11.23; Src (mouse) mapping to 2 H1.

SOURCE

p-c-Src (H-3) is a mouse monoclonal antibody specific for an epitope containing Tyr 530 phosphorylated c-Src of human origin.

PRODUCT

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

p-c-Src (H-3) is available conjugated to agarose (sc-166860 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166860 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166860 PE), fluorescein (sc-166860 FITC), Alexa Fluor® 488 (sc-166860 AF488), Alexa Fluor® 546 (sc-166860 AF546), Alexa Fluor® 594 (sc-166860 AF594) or Alexa Fluor® 647 (sc-166860 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166860 AF680) or Alexa Fluor® 790 (sc-166860 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166860 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

PROTOCOLS

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

APPLICATIONS

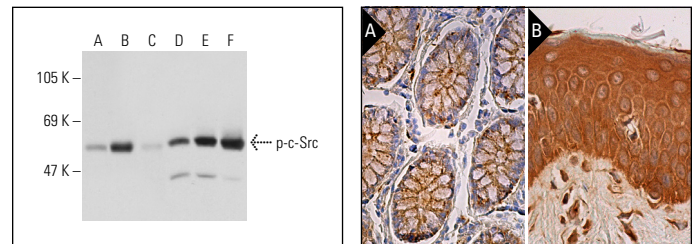
p-c-Src (H-3) is recommended for detection of Tyr 530 phosphorylated c-Src of human and rat origin, and Tyr 535 phosphorylated c-Src of mouse origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 c-Src siRNA (h): sc-29228, c-Src siRNA (m): sc-29859, c-Src siRNA (r): sc-270199, c-Src shRNA Plasmid (h): sc-29228-SH, c-Src shRNA Plasmid (m): sc-29859-SH, c-Src shRNA Plasmid (r): sc-270199-SH, c-Src shRNA (h) Lentiviral Particles: sc-29228-V, c-Src shRNA (m) Lentiviral Particles: sc-29859-V and c-Src shRNA (r) Lentiviral Particles: sc-270199-V.

Molecular Weight of p-c-Src: 60 kDa.

Positive Controls: A549 cell lysate: sc-2413, Jurkat whole cell lysate: sc-2204 or HEK293 whole cell lysate: sc-45136.

DATA



Western blot analysis of c-Src phosphorylation in untreated (A, D), serum starved and EGF treated (B, E) and serum starved, EGF and lambda protein phosphatase treated (C, F) HEK293 whole cell lysates. Antibodies tested include p-c-Src (H-3): sc-166860 (A, B, C) and c-Src (17AT28): sc-130124 (D, E, F).

p-c-Src (H-3): sc-166860. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic and membrane staining of glandular cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic and nuclear staining of keratinocytes, fibroblasts, Langerhans cells and melanocytes (B).

SELECT PRODUCT CITATIONS

- Suzuki, T., et al. 2014. c-Kit immunoexpression delineates a putative endothelial progenitor cell population in developing human lungs. *Am. J. Physiol. Lung Cell. Mol. Physiol.* 306: L855-L865.
- Kim, Y., et al. 2020. Ptch2/Gas1 and Ptch1/Boc differentially regulate Hedgehog signalling in murine primordial germ cell migration. *Nat. Commun.* 11: 1994.
- Weihrauch, D., et al. 2021. Intralipid increases nitric oxide release from human endothelial cells during oxidative stress. *JPEN J. Parenter. Enteral Nutr.* 45: 295-302.

RESEARCH USE

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